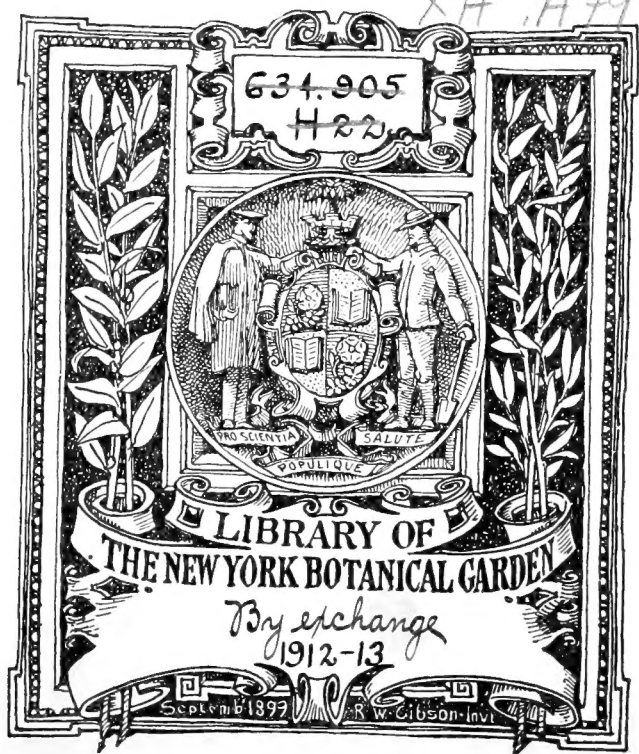


XH, A79



634.905
H22

LIBRARY OF
THE NEW YORK BOTANICAL GARDEN

By exchange
1912-13

September 1897 R. W. Gibson - Invt.

XH

A79

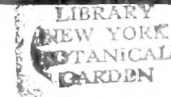
v. 35

1912-13

Aardwood Record

Eighteenth Year, }
Semi-Monthly. }

CHICAGO, OCTOBER 25, 1912



Subscription \$2.
Single Copies, 10 Cents.

LARGEST VENEER PLANT IN THE WORLD

C. L. WILLEY

MANUFACTURER OF

MAHOGANY, VENEER

HARDWOOD LUMBER

OFFICE, FACTORY AND YARDS:

2558 South Robey Street

Telephone Canal 930

BAND MILLS, MEMPHIS, TENN.

CHICAGO

W A N T E D

All Kinds of High-Grade

HARDWOODS

S.E. SLAYMAKER & CO.

Representing
WEST VIRGINIA SPRUCE LUMBER CO.,
Cass, West Virginia.

Fifth Ave. Bldg.,
NEW YORK

On the Following Stock We Will Make Special
Prices for Prompt Shipment:

80,000 ft. 1½" No. 2 Com. Poplar
121,000 ft. 2" No. 2 Com. Poplar
10,000 ft. 1¼" No. 1 & 2 Qtd. Poplar.
141,000 ft. 1" S. W. & No. 2 Com. Chestnut
107,000 ft. 1¼" S. W. & No. 2 Com. Chestnut
495,000 ft. 1½" S. W. & No. 2 Com. Chestnut
50,000 ft. 1½" No. 2 Common Plain Oak.
210,000 ft. 2" No. 2 Common Plain Oak.
40,000 ft. 1x12" & up No. 1 & 2 Chestnut.

THE ATLANTIC LUMBER CO.

70 Kilby St., BOSTON, MASS.

Keys-Walker Lumber Co.

Manufacturers

West Virginia Hardwoods

Soft Yellow Poplar

Oak—Chestnut—Bass—Hemlock, Etc.

Rough or Dressed

Write for Prices

ROANOKE, VIRGINIA

ICHABOD T. WILLIAMS & SONS

**Foreign and Domestic Woods
In Logs, Lumber and Veneers**

11th Ave. and 25th Street
NEW YORK

910 So. Michigan Avenue
CHICAGO

Hadentine Lumber Co.

Incorporated

Spruce, Hardwoods and Hemlock

in the same car

Office: Camden, N.J.

Mills: Horton, Dobbin and Laneville, W. Va.
Crestmont and Sunburst, N. C., and Norfolk, Va.

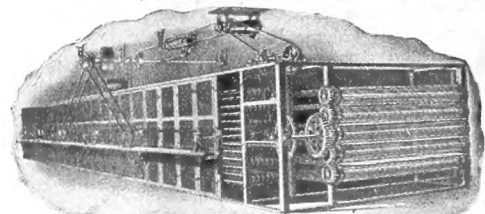
N. C. PINE

WHITE PINE

PROCTOR **VENEER DRYER** FIREPROOF
—AN—
UNPARALLELED SUCCESS

No
Splitting
Nor
Checking

No
Clogging
Nor
Adjusting



Recom-
mended by
all those
who
have tried
it

THE PHILADELPHIA TEXTILE MACHINERY COMPANY
DEPT. L HANCOCK & SOMERSET STS. PHILA. PA.

Construction Oak

For Car Building, Bridge Building, Boat Building, etc.

Send us your specification and let us submit a bid on your requirements

Some SPECIALS for Immediate Delivery

MAHOGANY—Thoroughly dry stock, especially fine in figure and texture— $\frac{5}{8}$ to 5 in. thick.

MAPLE—Hard and Soft—band sawn—Dry stock almost all widths and lengths.

CHESTNUT— $\frac{4}{4}$ to 3 in. thick—the select of West Virginia and Tennessee stocks. Special grades for veneering.

CHERRY—Band sawn—one to five in. thick. West Virginia and Penn. stocks.

“Everything in Lumber”

J. GIBSON McILVAIN & Co.
1420 Chestnut Street **PHILADELPHIA**

Wausau

“A Good Place to Come”

WAUSAU is the largest lumber producing point in Wisconsin, with a tributary supply of Hemlock, Tamarack, Pine, Birch, Basswood, Hard and Soft Maple, Rock and Soft Elm, Ash and other timber.

CENTRALLY LOCATED, with good freight service on two lines, dependable labor supply, cheap electric power, suitable factory sites, and the best of living conditions, **WAUSAU** offers excellent facilities for the manufacture of:

Hubs	Toothpicks
Dowels	Silos
Vehicle Parts	Last Blocks
Tanks	Kitchen Cabinets
Handles	Sporting Goods
Refrigerators	Woodenware

Let us send you our booklets, “Wausau, a Good Place to Come,” and “Factory Facilities in Wausau.” Please ask for them on your business letterhead.

**THE WAUSAU ADVANCEMENT
 ASSOCIATION**
Wausau, Wisconsin

H. C. CREITH & CO.

Hardwood Lumber

Some people can't deliver the goods. Give us an opportunity to demonstrate that we can.

COLUMBUS

OHIO

MICHIGAN

FAMOUS FOR HARD MAPLE AND GREY ELM

Michigan Hardwoods

MANUFACTURED BY

COBBS & MITCHELL, Inc.

CADILLAC, MICH.

September 13th, 1912

DRY STOCK LIST

4/4 Ash No. 2 Common & Better.....	20 M
4/4 Basswood No. 1 Common.....	100 M
4/4 Cherry No. 3 Common & Better.....	9 M
4/4 Cadillac Gray Elm 1s & 2s.....	50 M
4/4 Cadillac Gray Elm 1s & 2s (14 in. and wider).....	18 M
6/4 Cadillac Gray Elm 1s & 2s.....	50 M
4/4 Cadillac Gray Elm No. 1 Common.....	50 M
6/4 Cadillac Gray Elm, No. 1 and 2 Common.....	18 M
5/4 Hard Maple Step, 1s & 2s.....	28 M
6/4 Hard Maple Step 1s & 2s.....	25 M
8/4 Rock Elm No. 3 Common.....	22 M

"It is not what lumber costs you, so much as what you can get out of it, that decides its value for your work."

OUR OWN MANUFACTURE

W. D. YOUNG & CO.

MANUFACTURERS

FINEST MAPLE FLOORING

KILN DRIED, HOLLOW BACKED
MATCHED OR JOINTED
POLISHED AND BUNDLED

Hard Maple, Beech and Birch Lumber

1 TO 6 INCHES THICK

WRITE FOR PRICES

BAY CITY, MICHIGAN

Mitchell Brothers Company

DRY STOCK LIST

Michigan Hardwoods

CADILLAC, MICH.

September 13th, 1912

4/4 Ash No. 2 Common & Better.....	18 M
1x4 Basswood No. 1 Common.....	10 M
1x6 Basswood No. 1 Common.....	29 M
1x7 and up Basswood No. 1 Common.....	37 M
4/4 to 8/4 Cherry No. 2 Common & Better.....	26 M
4/4 Cadillac Gray Elm 1s & 2s.....	60 M
4/4 Cadillac Gray Elm No. 1 Common.....	75 M
4/4 Cadillac Gray Elm No. 2 Common.....	75 M
8/4 Cadillac Gray Elm No. 1 & 2 Common.....	3 M
6/4 Hard Maple, Step.....	8 M
4/4 Soft Maple No. 3 Common.....	22 M

CADILLAC QUALITY

When you want lumber of Cadillac Quality, Lumber which has been manufactured and seasoned properly, and grades which have not been blended to meet price competition—send us your inquiries.

WE SELL ONLY MITCHELLS-MAKE

THE Kneeland-Bigelow Co.

300,000 Feet

5/4 No. 2 Common and Better Beech

HARDWOOD MANUFACTURERS

100,000 ft. 5/4 1st and 2nds Basswood
250,000 ft. 5/4 No. 1 Common Basswood

This is of good average widths and lengths, containing a large percentage of 16 ft.

All of the above stock is nicely manufactured, being band sawed, trimmed, and well seasoned. We are prepared to quote attractive prices for this material for immediate shipment.

BAY CITY, MICH.



HARDWOOD AND YELLOW PINE LUMBER

***In Stock, Ready
To Ship***

3 cars 1x6 and wider 1st & 2nd Cottonwood
3 cars 1x9 to 12" Cottonwood Box Boards
4 cars 1" No. 1 Common Cottonwood
4 cars 1" No. 1 Common Sap Gum

WE make
a spe-
cialty of Oak
Timber and
Car Stock.

WRITE US FOR PRICES ON YELLOW PINE TIMBER, FLOORING, CEILING AND FINISHING.
SCHULTZ, HOLLOWAY CO., 343 South Dearborn Street, CHICAGO

ESTABLISHED SINCE 1880

TIMBER

WE OFFER TRACTS OF VIRGIN TIMBER IN LOUISIANA, MISSISSIPPI, FLORIDA, ALABAMA AND ALSO ON

PACIFIC COAST

We employ a larger force of expert timber cruisers than any other firm in the world. We have furnished banks and trust companies with reports on timber tracts upon which millions of dollars of timber certificates or bonds have been issued. We furnish detailed estimates which enable the buyer to verify our reports at very little expense and without loss of valuable time. Correspondence with bona fide investors solicited.

JAMES D. LACEY & CO.

JAMES D. LACEY, WOOD BEAL, VICTOR THRANE

1211 Whitney Central Building,
New Orleans
1215 Old Colony Bldg., Chicago

LARGEST TIMBER DEALERS
IN THE WORLD

1009 White Building, Seattle
1104 Spalding Bldg., Portland

CHICAGO

THE GREATEST HARDWOOD MARKET IN THE WORLD

A floor to adore

For thirty-three years Wilce's Hardwood Flooring has been among the foremost on the market and because it stands today "unequaled" is the best evidence that its manufacturer has kept abreast of modern methods and the advanced demands of the trade. To convince yourself of the above statements, try our polished surface flooring, tongued and grooved, hollow backed, with matched ends and holes for blind nailing—you'll find it reduces the expense of laying and polishing.

Our Booklet tells all about Hardwood Flooring and how to care for it—also prices—and is free.

The T. Wilce Company

22nd and Throop Sts. CHICAGO, ILL.

J. RAYNER VENEERED PANELS

ALL WOODS

SEND FOR STOCK LIST

MAHOGANY LUMBER

CARROLL AVE. AND SHELDON ST.
CHICAGO

Estabrook-Skeele Lumber Co.

MANUFACTURERS AND DEALERS IN

Maple, Birch, Elm, Basswood, Ash
And Other Northern Hardwoods

In the Market for Round Lots of Hardwood

WRITE US BEFORE SELLING

Fisher Building, CHICAGO

PHONE HARRISON 1984

Maisey & Dion

Loomis and 22nd Sts.

KILN DRIED & AIR DRIED
HARDWOODS

PHONES
CANAL 1830
CANAL 1831

SAVE YOUR MONEY BY USING THE

RED BOOK

Published Semi-annually
in February and August

It contains a carefully prepared list of the buyers of lumber in car lots, both among the dealers and manufacturers.

The book indicates their financial standing and manner of meeting obligations. Covers the United States, Alberta, Manitoba and Saskatchewan. The trade recognizes this book as the authority on the lines it covers.

A well organized Collection Department is also operated and the same is open to you. Write for terms.

Lumbermen's Credit Assn., ESTABLISHED 1878

608 So. Dearborn St.
CHICAGO

Mention This Paper.

116 Nassau Street
NEW YORK CITY

Going up—Hardwood Timber

We have the following hardwood and pine timber for sale at prices that have not as yet been advanced with the rise in value on timber lands. For a short time we offer—

150,000,000 FEET HARDWOOD IN SOUTHEAST
ARKANSAS — A SPLENDID OPPORTUNITY.

7,600,000 FEET OF HARDWOOD IN SOUTH-
WEST ARKANSAS

We also have timber in British Columbia and on the Pacific Coast and Oregon.

For further particulars, address

John C. Spry

Room 1230 Corn Exchange Bank Bldg., Chicago, Illinois

IF YOU HAVEN'T SEEN THE GIBSON TALLY BOOK

Let us send you one on approval, with samples of Tally Tickets for triplicate, duplicate or single tallies—a score of forms to choose from. They are the latest and best. Endorsed by hundreds of lumber manufacturers and buyers.

HARDWOOD RECORD

CHICAGO

KNOXVILLE

Famous for Finest Type of Poplar, Oak and Chestnut

VESTAL LUMBER AND MANUFACTURING CO. KNOXVILLE, TENNESSEE.

QUARTERED WHITE OAK OUR SPECIALTY

MANUFACTURERS OF
QUARTERED WHITE OAK, PLAIN OAK, POPLAR, WALNUT & TENNESSEE RED CEDAR LUMBER
BAND MILLS AT VESTAL, A SUBURB OF KNOXVILLE. SOUTHERN AND LOUISVILLE & NASHVILLE RAILROAD

H. S. MIZNER,
Pres.

C. C. CANNON,
Vice-Pres.

J. M. LOGAN,
Gen'l Manager

C. R. SWANN,
Sec'y and Treas.

LOGAN-MAPHET LUMBER CO.

MANUFACTURERS AND WHOLESALERS
HARDWOODS AND PINE
POPLAR A SPECIALTY

Main Office and Yards: Knoxville

Branch Office and Yard:

Bank and McLean Ave., Cincinnati L. M. ASHER, Mgr.

We Want Orders for the following Dry Stock:
WHITE OAK—Plain or Quartered.

RED OAK—Plain or Quartered.

CHESTNUT

BASSWOOD

POPLAR

WHITE PINE

Always carry large well
assorted stock of all
kinds of Hardwoods.

CAN SHIP ON SHORT NOTICE.

ED. MAPHET, Pres. and Mgr.

JAMES T. SHEA, Vice-Pres.

JOHN F. SHEA, Treas.

Maphet & Shea Lumber Co.

Manufacturers
and Wholesalers

OFFICE: 703-705 HENSON BUILDING

Yard: Middlebrook Pike and
Lonsdale Car Line

KNOXVILLE, TENN.

We manufacture: YELLOW POPLAR,
OAK, CHESTNUT, WHITE AND YEL-
LOW PINE, HEMLOCK BARK, ETC.

BAND AND CIRCULAR MILLS—EAST TENN.
MOUNTAIN VIRGIN HARDWOOD STUMPAGE

"THE VERY BEST"

Veneers in Any Wood

ASH, GUM

CHESTNUT

WHITE OAK

RED OAK

PINE, POPLAR

WALNUT

Knoxville Veneer Co.

P. B. RAYMOND, General Manager, Knoxville, Tenn.

Kimball & Kopcke Knoxville, Tennessee

Manufacturers and Shippers of

Appalachian Hardwoods

OAK OUR SPECIALTY

NASHVILLE

CELEBRATED FOR HIGHEST TYPE TIMBER GROWTH, FAULTLESS
MANUFACTURE AND GOOD GRADES.

If you want to get in touch with 2000 Live Wire Buyers of Hardwoods

It will pay you to find out about
the Hardwood Record's

BULLETIN SERVICE

One man, who uses the service
gives it credit for earning annu-
ally \$10,000 for him.

Write for pamphlet—

"Selling Lumber By Mail"

It will prove a revelation to you.

HARDWOOD RECORD

(Bulletin Dept.)

537 So. Dearborn St.,
CHICAGO

WE ARE OVERSTOCKED and will
name very attractive prices on a few
cars of each of the following items:

4 4, 6/4, 10 4 and 12 4 1s and 2s Poplar
4/4 and 8/4 Sap Poplar.
1 1/4", 1 1/2" and 2 1/2" No. 1 Common Poplar.
4 4 No. 1 and Panel Poplar in widths of 12 to 17", 18 to 23"
and 24" and up.
4/4 x 13 to 17" Poplar Box Boards.
4/4 1s & 2s Basswood or Linn—very fine.
3/8, 4/4, 5/4, 10/4 and 12/4 1s & 2s Qtd. W. Oak.
4/4, 5/4, 6/4 and 8/4 No. 1 Common Qtd. W. Oak.
6/4 1s & 2s Qtd. R. Oak.
4/4, 5/4 and 6/4 No. 1 Common Qtd. R. Oak.
6/4 and 10/4 1s & 2s Hickory.
4/4, 6/4, 10/4 and 12/4 No. 1 Common Hickory.
4/4, 6/4, 8/4, 10/4 and 12/4 No. 2 Common Hickory.
4/4 1s & 2s Chestnut, also 5, 6 and 8/4.
4/4 No. 1 Common Chestnut.

John B. Ransom & Co.

MANUFACTURERS OF

Hardwood Lumber

Nashville, Tenn.

IF YOU BUY LUMBER

Naturally you want only well manufactured stock, clean
grades and prompt service. We can give you all three.

We have a well assorted stock of Plain and
Quartered Red and White Oak, Poplar, Ash,
Chestnut, Hickory and Aromatic Tennessee
Red Cedar, practically all of which is our
own manufacture.

LOVE, BOYD & CO., Nashville, Tenn.

Cherokee Lumber Co.

Manufacturers of all the lumber we sell.

Let us quote you some attractive prices
on quartered white oak and poplar.
Any grades and thicknesses.

NASHVILLE, TENN.

Tennessee Hardwoods

Tennessee Hardwood
Lumber Co.

West Nashville

The Gibson Aluminum Tally Book Cover
and Tally Tickets are now employed by
more than 2,000 lumber manufacturers,
dealers and consumers.

LAMB-FISH LUMBER CO.



Band Mill and General Offices

CHARLESTON,

MISS.

**THE LARGEST HARDWOOD MILL IN THE WORLD
ANNUAL CAPACITY, 40,000,000**

STOCK LIST—Dry Lumber on Hand October 1, 1912

TELEGRAPH
CODES
UNIVERSAL
HARDWOOD
WESTERN UNION
Cable Address, Lamb

	3 8	1 1/2	5/8	3/4	4 4	5 4	6 4	8 4	10 4	12 4	16 4
FAS Quartered White Oak, 6" and up.....	8,000	60,000		40,000	30,000		7,000				
No. 1 Common Quartered White Oak, 4" and up.....		12,000		12,000	110,000	4,000					
No. 2 Common Quartered White Oak.....		5,000			20,000						
FAS Plain White Oak, 6" and up.....	30,000	120,000	140,000	30,000		20,000		12,000	3,000		2,000
FAS Plain White Oak, 12" and up.....				4,000							
No. 1 Common Plain White Oak, 4" and up.....		18,000	40,000	10,000	100,000	5,000		10,000	9,000		
FAS Plain Red Oak, 6" and up.....			20,000	20,000	150,000						1,000
No. 1 Common Plain Red Oak, 4" and up.....			15,000	25,000			18,000	1,000			
FAS Red Gum.....	200,000	150,000	110,000	250,000	220,000	40,000	70,000	40,000		3,000	
FAS Quartered Red Gum.....								3,000			
FAS Circassian Red Gum.....				12,000	40,000		3,000	1,000			
No. 1 Common Red Gum.....	60,000	20,000	130,000	40,000		20,000		5,000			
FAS Sap Gum, 18" and up.....					100,000						
FAS Sap Gum, Reg. W. & L.....	50,000	40,000	20,000			15,000	10,000	15,000			
No. 1 Common Sap Gum.....		60,000			90,000						
No. 2 Common Sap Gum.....	50,000	35,000	25,000	60,000	300,000	200,000	20,300				
Shop and Better Cypress.....								50,000			
No. 1 Common Cypress.....								20,000			
Log Run Elm.....							20,000	20,000			
Common and Better Tupelo.....					40,000						

OUR LUMBER CONTAINS ALL WIDE STOCK PRODUCED IN MANUFACTURING AND WILL RUN OVER 50% OF 14 AND 16 FT. LENGTHS. WE ALSO MANUFACTURE OAK TIMBERS AND BRIDGE PLANK—FACILITIES FOR KILN DRYING AND DRESSING

"STEARNS" QUALITY LUDINGTON

HARDWOOD SPECIALISTS

OUR WINTER SUPPLY OF DRY

THICK HARD MAPLE

is now ready for the market. We have a nice assortment of 1 1/4", 1 1/2", 2", 3" and 4".

Quotations will be given cheerfully

The **STEARNS**
SALT & LUMBER CO. LUDINGTON, MICH.

BAND SAWN HARDWOODS

WE PRODUCE OUR OWN STOCKS

OAK—Plain and Quartered, Red and White

COTTONWOOD—Ash, Southern Elm, Gum, Soft Maple

A FEW ITEMS WE WANT TO MOVE:

100,000 feet 5' 4" x 13" to 17" 1sts & 2nds Cottonwood.
 110,000 feet 4' 4" x 22" & up No. 1 & Panel Cottonwood.
 200,000 feet 4' 4" x 13" to 17" Cottonwood Box Boards.
 75,000 feet 4' 4" 1sts & 2nds Quartered White Oak.
 97,000 feet 4' 4" No. 1 Common Quartered White Oak.
 115,000 feet 4' 4" 1sts & 2nds Red Gum.
 200,000 feet 4' 4" to 8' 4" No. 1 Shop & Better Cypress.

WRITE US FOR PRICES

ANDERSON-TULLY COMPANY
HARDWOOD LUMBER **Memphis, Tenn.**

A Prominent Veneer Man says:

¶ "I believe your new service showing the exact requirements of the Veneer and Panel Trade to be highly accurate, and a necessary part of the office equipment of any progressive veneer or panel factory."

¶ The same information would cost you thousands of dollars. The cost of our service is a small fraction of that.

¶ Ask your competitor to tell you how it has helped him, and then write us for details.

HARDWOOD RECORD,

CHICAGO, ILL.

WEST VIRGINIA

WHERE THE BEST HARDWOODS GROW



CHARLESTON, W. VA.

2 cars 6/4" Log Run Beech.
 30,000 ft. 5/4" No. 2 Common West Va. Poplar.
 150,000 ft. 4/4" No. 1 Common & Selects W. Va. Yellow Poplar.
 20,000 ft. 8/4" Log Run Hickory.
 22,000 ft. 4/4" 1sts & 2nds W. Va. Qtd. White Oak.
 36,000 ft. 6/4" No. 1 Common & Better Chestnut.
 15,000 ft. 4/4" No. 2 Common Basswood.
 15,000 ft. 5/4" Log Run Basswood.
 100,000 ft. 4/4" 1sts & 2nds Sap Gum.

50,000 ft. 4/4" No. 1 Common Sap Gum.
 75,000 ft. 4/4" 1sts & 2nds Red Gum.
 30,000 ft. 4/4" No. 1 Common Red Gum.
 50,000 ft. 4/4" Selects & Better Cypress.
 40,000 ft. 4/4" No. 1 Common & Shop Cypress.
 10,000 ft. 4/4" No. 2 Common & Shop Cypress.
 25,000 ft. 8/4" No. 2 Common & Pecky Cypress.
 8,000 ft. 3/4" Log Run Quartered White Oak.
 8,000 ft. 4/4" Log Run Quartered White Oak.
 3,000 ft. 4/4" No. 2 Common Qtd. White Oak.

Peytona Lumber Company

Inc.

WHOLESALE MANUFACTURERS

HARDWOOD LUMBER

HUNTINGTON, W. VA.

Yellow Poplar, Basswood, Chestnut, Oak, Ash

BAND MILL AND YARDS,
 1st Ave. and 20th to 24th Sts.

10 cars 4/4 Select & No. 1 Com. Poplar (50% Selects, 60% 14' & 16' long).
 4 cars 4/4 13" to 17" Poplar Box Boards (75% 14' & 16').
 2 cars 4/4 No. 1 Panel Poplar, 18" to 23" (60% 14' & 16').
 1 car 4/4 No. 1 Panel Poplar, 24" & up (60% 14' & 16').

All high-grade band sawn stock. Good widths.

WE MANUFACTURE AND
 DEAL IN

TIES, HARDWOOD LUMBER AND TIMBER

We want to buy a large
 amount of 4/4, 8'—8'6"
 Oak from Tie Sides

Hill Bros. Tie & Lumber Company
 Charleston, W. Va.

DRY STOCK

1 car 10, 12 & 16/4 C & B Plain OAK.	2 cars 6/4 No. 1 Com. POPLAR.
3 cars 4/4 No. 1 Com. Plain OAK.	3 cars 4/4 Log Run BASSWOOD.
2 cars 4/4 No. 2 Com. Plain OAK.	2 cars 4/4 Log Run BUCKEYE.
1 car 4/4 1s & 2s POPLAR.	1 car 8/4 Log Run MAPLE.
1 car 4/4 Sap POPLAR.	1 car 4/4 No. 1 C & B MAPLE.
3 cars 4/4 No. 1 Com. POPLAR.	1 car 5/4 C & B CHESTNUT.

Send Us Your Inquiries

Boice Lumber Co., Inc.
 RICHMOND, VIRGINIA

Put the Hardwood Club On Your Mailing List

When you are in a hurry to get lumber, and want it just right as to price, grade and other features, don't waste time and effort sending out a big batch of inquiries to dozens of firms; make sure of getting quick action by letting the Louisville Hardwood Club handle it.

When you ask for quotations from the club, you get prices from all its individual members who handle that particular kind of stock, thus assuring yourself of receiving offers from everybody in this, the leading market of the Hardwood Belt, who is in a position to supply your wants.

Of special items, which a single firm may have trouble in quoting on, you can always get a car or two in Louisville, for by our co-operative service the stocks of various members may be drawn on to make up the necessary quantity of lumber. It is handled through one house, however, thus making the transaction simple and convenient for you.

There are a lot of points about Hardwood Club service that it would pay you to find out about. Don't be too bashful to let us know when you are in the market.

The Louisville Hardwood Club

NORMAN LUMBER COMPANY
Mill at Holly Ridge, La.

OHIO RIVER SAWMILL COMPANY

BOOKER-CECIL COMPANY

W. P. BROWN & SONS LUMBER COMPANY

THE LOUISVILLE VENEER MILLS

LOUISVILLE POINT LUMBER COMPANY

C. C. MENGEL & BRO. CO.

EDWARD L. DAVIS LUMBER COMPANY

Wood-Working Machines For Those Who Discriminate

BEAR THE IMPRINT OF THE WORD

DEFIANCE

ON THE ORIGINAL CASTING

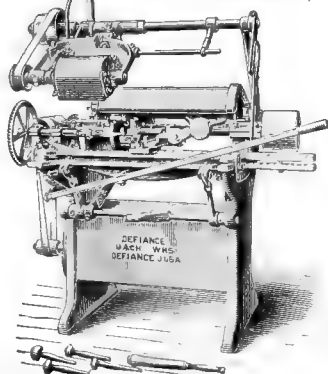
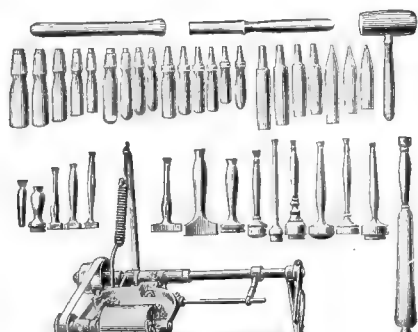
It means we defy any wood-working machine on the market today to produce results with as high a character as those produced on our tools.

We have always aimed to give the trade the best we, or any one else, could produce, and the future for DEFIANCE buyers contains even a higher expectation.

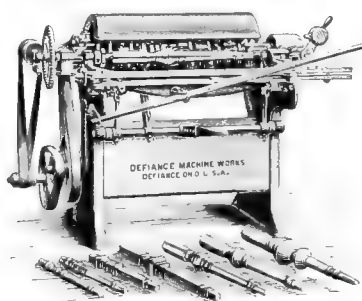
An initial order will prove our claim.

Write us for catalog and prices.

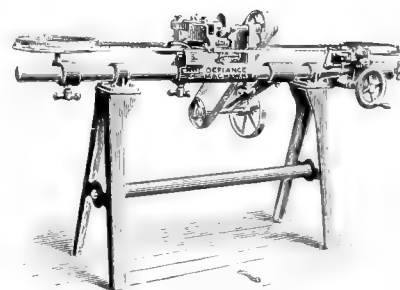
The Defiance Machine Works,
414 Perry Street, Defiance, Ohio



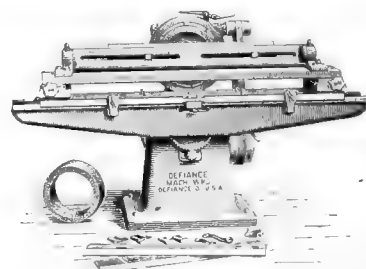
24" Handle Lathe



Patent Variety Lathe



Band Saw Filing and Setting Machine



Cup Wheel Knife and Bar Grinder

IF YOU WANT THE BEST SYSTEM OF ACCURATELY TALLYING AND RECORDING LUMBER SHIPMENTS OR RECEIPTS

YOU WILL BE INTERESTED IN

The Gibson Tally Book

This system of tallying lumber is employed by more than two thousand lumber producers, jobbers and wholesale consumers, and is available for tallying lumber, logs, flooring, dimension stock and all other commodities.

Makes three original tallies without the use of loose carbon sheets.

New Catalogue showing twenty-six various forms of tickets sent free on request.

Tally Book Dept., Hardwood Record, Chicago

CINCINNATI

THE GATEWAY OF THE SOUTH

Why Is Cincinnati? The Leading Veneer Market •

SEE THE ADVERTISERS ON THIS PAGE AND YOU WILL KNOW

OHIO VENEER COMPANY

OFFICE AND MILLS:

**2624-2634 Colerain Avenue
CINCINNATI OHIO**

WE are large manufacturers of Foreign and Domestic Hardwood Lumber and Veneers.

We specialize in Genuine Poti (Russia) Circassian stock, taken up by our own buyer and shipped direct. (Poti stock is the best in the world.)

All buyers admit Ohio Veneer Company's product has a pronounced individuality.

Stock complete and large enough to fill any order.

ACME VENEER & LUMBER COMPANY CINCINNATI OHIO

Our mill is now cutting what is said to be the **LARGEST VIRGIN WHITE OAK** timber in Ohio. It is of soft, brashy texture from the best White Oak Section.

Our new line of Circassian is ready for the market.

Do not overlook us when in the market for

MAHOGANY

CURLY BIRCH

ROSEWOOD

OR ANY KIND OF PLAIN VENEER

We make a specialty in all woods of 1/8, 3/16 and 1/4 thicknesses for Interior Finish and Door Work.

CIf you are not a subscriber to **HARDWOOD RECORD** and have a suspicion that you would like to see a copy, it is yours for the asking.

**The Maley, Thompson
& Moffett Co.**

**Veneers, Mahogany and
Hardwood Lumber**

Largest Stocks

Best Selections

CINCINNATI, OHIO



CINCINNATI
THE GATEWAY OF THE SOUTH



KENTUCKY LUMBER COMPANY

GENERAL SALES OFFICE: FIRST NATIONAL BANK BUILDING, CINCINNATI, OHIO

For Quick Shipment We Will Make Very Low Price on

5 Cars 5-4 No. 1 Common Poplar
5 Cars 6-4 No. 1 Common Poplar
5 Cars 4-4 No. 2 Common Poplar

W. E. HEYSER, President WEAVER HASS, V. President
BENJAMIN BRAMLAGE, Sec'y & Treas.

The W. E. Heyser Lumber Company

MAIN OFFICE & YARDS
Winton Place
Cincinnati, Ohio

BRANCH YARDS AND MILLS
West Virginia, Mississippi, Arkansas & Kentucky

12,000,000 ft. High
Grade West Vir-
ginia and Southern
Hardwoods in
stock at all times.

Shipments made
direct from our
own yards and
mills in straight or
mixed cars.

SEND US YOUR INQUIRIES

WE WANT TO BUY

1", 1¼", 1½" 1s & 2s AND NO. 1 COMMON SAP GUM
1", 1½" & 2" 1s & 2s AND NO. 1 COMMON RED GUM
1" NO. 1 COMMON TUPELO.

SUBMIT US YOUR STOCK SHEETS
WITH BEST CASH PRICES

DUHLMEIER BROS.
CINCINNATI, OHIO

WE SELL "SERVICE"

in connection with a full line
of OAK, GUM, POPLAR,
and other HARDWOODS

If you appreciate "service," in
all its details, write, wire or phone

THE M. B. FARRIN LUMBER CO.
CINCINNATI, OHIO

CINCINNATI

THE GATEWAY OF THE SOUTH

E. C. Bradley Lumber Co.

702 Gerke Building,

Cincinnati, Ohio

2 cars 4/4 No. 2 Com. & Better Ash.
 1/2 car 4" No. 1 Com. & Better Ash.
 1/2 car 3" No. 1 Com. & Better Ash.
 3 cars 3" No. 1 Com. & Better Soft Maple.
 1 car 8/4 No. 1 Com. & Better Soft Maple.
 1/2 car 4" No. 1 Com. & Better Soft Maple.
 1 car 1" Log Run Cherry.

100,000 ft. 4/4 Log Run Maple.
 30,000 ft. 4/4 No. 2 Common Poplar.
 15,000 ft. 4/4 Clear Sap Poplar.
 13,500 ft. 4/4 No. 1 Panel Poplar, 18" to 24" wide.
 14,000 ft. 4/4 No. 1 Panel Poplar, 24" & up, 30% 34" and up, 50 to 60% 14" & 16" long.
 75 pcs. 1" No. 1 Panel Poplar, 39" to 48" wide, 16" long.
 72 pcs. 1" No. 1 Panel Poplar, 24" to 39", 16" long.

All of the above is band sawed, good widths and lengths, and we can make prompt shipment

BENNETT & WITTE

JUST A FEW OF OUR SPECIALS

1 car 4/4" No. 1 & Panel Sap Gum, 21" to 25".
 2 cars 4/4" 1 & 2 Red Gum, 18" to 27".
 3 cars 4/4 No. 1 Com. Qrtd. Red Oak.
 2 cars 4/4 1 & 2 Pl. Red Oak, 12" & up.
 1 car 4/4 No. 1 Com. Qrtd. White Oak.
 1 car 12/4 1 & 2 Pl. White Oak.

2 cars 4/4" Sd. Wrmy. & No. 2 Com. Qrtd. Chestnut.
 3 cars 4/4 1 & 2 Poplar.
 1 car each 12/4" No. 1 Com. Selects & 1 & 2 Poplar.
 1 car each 4/4 No. 1 Com. & 1st & 2nds Ash.
 1 car 4/4, 5/4 & 6/4 1 & 2 Ash, 12" & up wide.
 1 car 8/4", 10/4, 12/4 & 16/4" 1 & 2 Ash, 12" & up wide.

Main Office
 CINCINNATI, OHIO
 222 W. 4th Ave.

SOUTHERN OFFICE, MEMPHIS, TENN.
 EXPORT OFFICE, NEW ORLEANS, LA.

SECURE BETTER PRICES

AT LESS SELLING COST BY REACHING MORE CUSTOMERS. HARDWOOD RECORD PUTS YOU BEFORE THEM ALL TWICE A MONTH.

ASK US ABOUT IT

MOWBRAY & ROBINSON

SPECIALISTS IN

OAK-ASH-POPLAR

ALWAYS IN THE MARKET FOR
 ROUND LOTS OR MILL CUTS

OFFICE AND YARDS
 SIXTH ST., BELOW HARRIET

CINCINNATI

L. W. RADINA & CO.

DEALERS IN

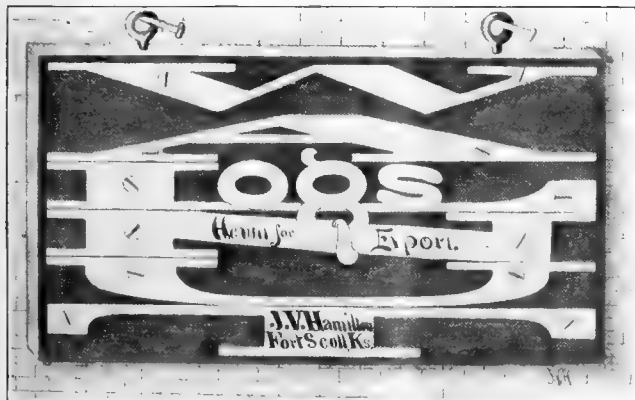
POPLAR AND HARDWOODS

CINCINNATI

:

:

OHIO



IF YOU HAVEN'T SEEN THE GIBSON TALLY BOOK

Let us send you one on approval, with samples of Tally Tickets for triplicate, duplicate or single tallies—a score of forms to choose from. They are the latest and best. Endorsed by hundreds of lumber manufacturers and buyers.

HARDWOOD RECORD

CHICAGO

THE EAST

BOSTON

NEW YORK

PHILADELPHIA

WM. WHITMER & SONS

INCORPORATED

Manufacturers and Whole-
salers of All Kinds of

"If Anybody Can,
We Can"

HARDWOODS

West Virginia Spruce and Hemlock
Long and Short Leaf Pine Virginia Framing

Franklin Bank Bldg.

PHILADELPHIA

Willson Bros. Lumber Co.

MANUFACTURERS

WEST VIRGINIA HARDWOODS

Oliver Building

PITTSBURG, PA.

PROMPT SHIPMENT

1 car 4 4 No. 1 Com. and Saps Poplar.
2 cars 4 4 No. 2 Com. & Better Hard Maple.
2 cars 8 4 Log Run M. C. O. Soft White Pine.
2 cars 5 4 Log Run M. C. O. Basswood.

DANIEL B. CURLL, Real Estate Trust Bldg., PHILADELPHIA

JONES HARDWOOD COMPANY

WHOLESALE DEALERS IN

HARDWOODS—Poplar and Gum

33 Broad Street,

BOSTON, MASS.

BEECHER & BARR

OAK

CHESTNUT

POPLAR

WHITE PINE, YELLOW PINE AND HEMLOCK
INTERIOR TRIM. HARDWOOD FLOORING.

442 LAND TITLE BLDG.

PHILADELPHIA, PA.

Saw Mills Designed and Built

Plans and specifications prepared. Construction supervised.
First class heavy millwright work. Entire plants surveyed. Ma-
chinery for complete mills. Fire loss adjustments. Practical
sawmill engineer. Can save you money. Highest testimonials.

C. M. STEINMETZ,

P. O. Box 83, Washington, D. C.

CHAS. K. PARRY & CO.

Hardwood Lumber

LAND TITLE BUILDING, PHILADELPHIA, PENNSYLVANIA

WE WANT 5/4 No. 1 common Red Oak 8/4 No. 1 common Red Oak
4/4 No. 2 common Red Oak Log Run Basswood

CHARLES HOLYOKE

141 MILK STREET, BOSTON, MASS.

HARDWOODS

WM. E. LITCHFIELD

MASON BUILDING, BOSTON, MASS.

Specialist in Hardwoods

Manufacturers are requested to supply lists of stock for sale

H. D. WIGGIN

89 STATE STREET
BOSTON, MASS.

MANUFACTURER HARDWOOD LUMBER

Circular-sawed Poplar, Oak, Chestnut, Basswood, Maple

Mill at Stone Coal Junction, West Virginia

The CHEAPEST HARDWOOD LOGGING

IS DONE WITH

LIDGERWOOD CABLEWAY SKIDDERS



LIDGERWOOD MFG. CO.
96 Liberty Street, New York

Branch Offices
CHICAGO SEATTLE
Agencies
NEW ORLEANS—WOODWARD, WIGHT & CO. LTD.
CANADA—ALLIS CHALMERS BULLOCK LTD.
MONTREAL VANCOUVER

THE EAST

LEADING MANUFACTURERS AND JOBBERS

W. P. Craig Lumber Co.

Wholesale Hardwood and Building Lumber

Empire Building, :: PITTSBURG, PA.

Immediate Shipment

5 cars 4/4 No. 1 Common Yellow Poplar
4 cars 4/4 No. 1 Common Oak
DRY—Good lengths and widths

J. S. KENT CO., PHILADELPHIA

PALMER & PARKER CO.
TEAK MAHOGANY EBONY
ENGLISH OAK VENEERS DOMESTIC
CIRCASSIAN WALNUT HARDWOODS
103 Medford Street, Charlestown Dist.
BOSTON, MASS.

WISTAR, UNDERHILL & NIXON
REAL ESTATE TRUST BUILDING, PHILADELPHIA, PA.
QUARTERED WHITE OAK
NICE FLAKY STUFF

We Know How to fill your orders for all kinds of HARD-
WOODS, WHITE PINE, YELLOW PINE,
SPRUCE, HEMLOCK, CYPRESS, HARDWOOD FLOORING.
Give us a trial.

THOMAS E. COALE LUMBER COMPANY
FRANKLIN BANK BUILDING, PHILADELPHIA, PA.

HARD MAPLE

When the quality of being hard is required in Maple, Vermont or Adirondack stock should be specified. Maple will not grow harder for us than other people, but it certainly does grow harder in this section of the country than elsewhere.

WE CAN MAKE PROMPT SHIPMENTS.

GEO. WEBSTER LUMBER CO.
SWANTON, VT.

New York Office
25 West 42nd St.

ASH
4/4, 5/4, 6/4,
8/4, 10/4, 12/4
and 14/4.

AMERICAN LUMBER & MFG. COMPANY
Manufacturers and Wholesalers
PITTSBURGH, PA.

POPLAR
4/4 Bay Poplar
(Tupelo 1st and 2nds.)

MAPLE
4/4, 5/4, 6/4,
8/4, 10/4, 12/4
and 16/4.

HARDWOOD
White and Yellow Pine

OAK
White and Red, Quartered and plain sawed, all grades and thicknesses.

YELLOW POPLAR

We make a specialty of thick White Ash, Hard Maple and White Oak.

Railroad Car and Construction Oak timbers, long lengths and special sizes.

All grades and thicknesses.

Write for prices before heavy call for Spring requirements.

CHESTNUT
All grades and thicknesses.

SPRUCE
All grades and thicknesses.

CHERRY
50 M ft. 4/4
No. 8
Common

CHESTNUT
100,000 feet
of 8/4 Sound
Wormy and
No. 2 Com-
mon.

WE HAVE IT
W. W. DEMPSEY
Manufacturer and
Wholesaler of
HARDWOODS

CYPRESS
250,000 feet
of 4/4 No. 1
Common &
Better, Old
grading.

SPRUCE
4/4 and 8/4
Clear and
Select, 8/4
Box and Mill
Cull

BAND SAWED STOCK
A LINE BRINGS PRICE BY RETURN MAIL
General Offices Johnstown, Pa. New York Office No. 18 Broadway

R.E. Wood Lumber Company

☞ Manufacturers of Yellow Poplar, Oak, Chestnut, Hemlock and White Pine.

☞ We own our own stumpage and operate our own mills.

☞ Correspondence solicited and inquiries promptly answered.

GENERAL OFFICES:
CONTINENTAL BUILDING.

Baltimore, Maryland

YOU pay a *little* more for our hardwood lumber than you do for many others, but it's worth *much* more.

With our modern and first-class equipment and expert operatives, we couldn't make bad lumber if we tried to, because the *quality* and *size* of our virgin tough mountain white ash, red birch, yellow poplar, buckeye, maple, red oak, cherry and basswood, averaging less than three logs to the thousand, and 95 per cent sixteen feet, is the best type of hardwood timber growth in the United States, and shows a larger percentage of *firsts*.

If you are a discriminating buyer let's get acquainted.

LITTLE RIVER LUMBER COMPANY,

Townsend, Tenn.

Dry Poplar for Immediate Shipment

2 cars 4/4 Fas.
2 " 4/4 Saps, Selects.
3 " 4/4 No. 1 Common.
3 " 6/4 No. 2 Common.
1 " 8/4 Fas.
2 " 8/4 Saps, Selects.
5 " 8/4 No. 1 Common.
4 " 8/4 No. 2 Common.
2 " 10/4 No. 1 Common.

FAUST BROTHERS LUMBER COMPANY

Sales Office
1319 Fisher Bldg., CHICAGO

Main Office
PADUCAH, KENTUCKY

FREIGHT OVERCHARGES

WE SPECIALIZE ON LUMBER TRAFFIC
We represent nearly every member of The Mississippi Pine Association

Our overcharge claims for one company, \$6,000.00

Let us analyze your freight accounts
Collect past and prevent future overcharges
Best references from Lumbermen from
Canada to Mexico

COST BASED ON RESULTS

Write for particulars and terms.

The American Freight Audit & Storage Co.

Incorporated
Rooms 55-8, 39 West Adams St. Chicago

**FIRE
INSURANCE**

Lumber Underwriters

66 BROADWAY
NEW YORK

E. F. PERRY, Manager.

Poplar! Poplar!! Poplar!!!

WE HAVE THE FOLLOWING BAND SAWN AND EQUALIZED POPLAR LUMBER.

1 Car 1/2 1s-2s Clear Saps, 6" and up wide.
2 Cars 5/8 1s-2s Clear Saps, 6" and up wide.
1 Car 4/4 Clear Sap Strips, 5"x6" wide.
10 Cars 4/4 1s-2s Clear Saps, 6" and up wide.
10 Cars 4/4 1s-2s Poplar, 7" to 17" wide.
5 Cars 4/4 Panel and No. 1 Poplar, 18" to 23" wide.
2 Cars 4/4 Panel and No. 1 Poplar, 24" to 37" wide.
5 Cars 4/4 Box Boards Poplar, 10" to 12" wide.
5 Cars 4/4 Box Boards Poplar, 13" to 17" wide.

LET US QUOTE YOU.

Russe & Burgess, Inc., Memphis, Tenn.

OAK FLOORING

**Kiln-
Dried
Polished**



**Hollow
Backed
and
Bundled**

HARDWOOD RECORD is a different kind, and altogether better lumber newspaper than has hitherto been published. This is made possible by the loyal co-operation and support of the hardwood element of the lumber industry. If you are a subscriber you will agree.



Hardwood Record



Published in the Interest of the American Hardwood Forests, the Products thereof, and Logging, Saw Mill and Wood-working Machinery, on the 10th and 25th of each Month, by

THE HARDWOOD COMPANY

Henry H. Gibson, President

Burdie Anderson, Sec'y and Treas.

Entire Seventh Floor Ellsworth Building
537 So. Dearborn Street, CHICAGO

Vol. XXXV

CHICAGO, OCTOBER 25, 1912

No. 1



Review and Outlook



General Market Conditions

Nothing has occurred in the last fortnight that involves any new phase in hardwood market conditions, save that red and white oak, both plain and quartered, and of all grades and thicknesses, is growing in still shorter supply with advancing prices. Northern hardwoods in the hands of producers are fully fifty per cent short of a year ago, and that is the general situation with the majority of southern hardwoods.

Poplar in some items is in fairly good supply, and there seems to be a growing accumulation of both first and seconds and number one common red gum and first and seconds sap gum, with the result that the good end of gum seems to be slightly weakening in value. This is somewhat remarkable when this wood seems to be in better repute than ever before in its history. On every hand and for hundreds of new purposes it is growing in appreciation, which is fully warranted by its intrinsic merits. It has been but recently discovered that red gum, when exposed to alternate dryness and dampness, will outlast cypress or the best varieties of southern oak, but such is unmistakably the fact. Furniture and interior finish people are using large quantities of it, but there seems to have been an extraordinary effort on the part of manufacturers to produce a large quantity since the flood period of the Mississippi valley last spring, with the result that there is danger that the demand will not equal the supply unless production is materially reduced.

Mahogany, Circassian walnut and English oak, notably the first-named wood, are enjoying a tremendous and increasing demand, which is taxing the capacity of all foreign wood mills to their utmost.

The veneer and panel business is improving in volume of demand and somewhat in price, although at a recent conference of veneer and panel producers in Chicago it was generally conceded that the plants that are busiest are delivering goods on a basis that shows very little profit. Undoubtedly veneer and panel products are being sold at much less relative value than solid wood.

The hardwood flooring trade is in a fairly satisfactory condition and although the stocks in warehouse of a year ago have been very materially reduced, there still remains ample supply of both oak

and maple flooring in the hands of manufacturers. The agricultural implement, broom handle and hickory handle industries are in a fairly satisfactory condition, both in demand and price.

There is every indication that the general volume of trade in hardwood forest products will be fully maintained at the present demand or even a stronger one as the fall advances, as the furniture trade, interior finish and manufacturers of many articles employing hardwoods, including the box-shook industry, report that all see active business ahead of them for months to come.

The Eucalyptus Game

With every recurring period of good times the country is flooded with promotion enterprises, the majority of which are schemes put up by unscrupulous promoters to secure investments in enterprises that are usually of very questionable character. It was supposed that after the exposures of the eucalyptus land promotion enterprises in California that have been published by HARDWOOD RECORD during the last two years, and widely quoted by other leading journals, there would be a suspension of attempts to force eucalyptus-growing properties on the public.

Such is not the case. In this recurring period of good times the promoters of eucalyptus-growing schemes have become more numerous than ever, and, like Banquo's ghost, will not down. They are issuing the most specious and misleading literature on the subject of eucalyptus that ever attended the promotion of any enterprise, good, bad or indifferent. They are making statements of the possibility and even certainty of enormous profits of eucalyptus planting that are in no instance borne out by the facts. Let it be unmistakably said in HARDWOOD RECORD, with the assurance that the statement can be fully verified, that eucalyptus, and notably the particular variety chiefly under planting in California, is a wood with fewer virtues and with less possible value than any other variety of commercial timber that grows in the United States. HARDWOOD RECORD regards eucalyptus and eucalyptus growing as absolutely fraudulent, and within a very short time will publish specific and carefully prepared information covering the subject in full, based on a thorough investigation and analysis by the best wood-utilization experts in the United States, fully substantiating the statements above made.

SUBSCRIPTION TERMS: In the United States and its possessions, and Canada, \$2.00 the year; in foreign countries, \$1.00 extra postage.

In conformity with the rules of the postoffice department, subscriptions are payable in advance and in default of written orders to the contrary, are continued at our option.

Instructions for renewal, discontinuance, or change of address, should be sent one week before the date they are to go into effect. Both old and new addresses must be given.

Both display and classified advertising rates furnished upon application.

Advertising copy must be received five days in advance of publication dates.

Telephones:—Harrison 8086-8087-8088.

Henry H. Gibson, Editor; Hu Maxwell and Edwin W. Meeker, Associate Editors.

Entered as second-class matter May 26, 1902, at the postoffice at Chicago, Ill., under act of March 3, 1879.

People who invest their money in eucalyptus growing are simply throwing it to the dogs, because eucalyptus at its best does not constitute a material that makes even a commendable firewood.

Opportunity Neglected

Lumbermen have been slow to make use of the opportunity afforded by the government forest products laboratory maintained at Madison, Wis., and fully equipped with machines, apparatus and technically trained men, to make tests and carry on experiments along lines in which lumbermen ought to be interested. The laboratory has been at work more than three years, and during that time it is said not one lumberman has visited it to investigate its work or its scope. The only reasonable explanation of that state of affairs is that those engaged in the lumber business are not fully informed of the existence of the laboratory, or, at least, do not know of the opportunities offered by it for solving or helping to solve problems of the greatest importance.

Although the lumber business in this country is about three hundred years old, and large numbers of very competent, experienced men have been engaged in it, it is nevertheless a fact that a good many features of cutting and handling the products of the forest are yet in experimental stages. At any rate, some of the old methods are too slow for present conditions, while an increasing scarcity of certain kinds of timber makes it necessary to lay aside methods which once might have been all right but are now out of date.

The laboratory's work is along practical lines; it deals with present conditions, not those which prevailed long ago. It does not concern itself with theories which lead no man knows where. Its purpose is to apply science to common, simple problems which have not yet been worked out in a satisfactory manner. Take the matter of seasoning lumber as an example. No millman claims that the last word has been said on that subject, or that present methods are accomplishing all that is to be desired. Much has been learned, but something remains to be found out, and right there is where the laboratory is getting in its work.

It is seasoning lumber by every known process which promises valuable results, and it is pushing its investigations somewhat outside the processes which have been tried elsewhere and heretofore. It carries out air drying; it applies artificially heated air; it mixes the hot air with certain amounts of moisture; it applies steam under all pressures from atmospheric up to three hundred pounds. It combines, varies and modifies these methods and makes record of results. Special apparatus has been constructed to test every process at every step. Checking, warping, shrinking, swelling, case-hardening, and all other undesirable results which have plagued lumbermen from the beginning until the present, are duly studied, with a view to finding a cure.

Work has followed another line, no less interesting and no less valuable. Preservative treatment of timber to lessen decay is no new thing, but the art still seems to be only on the threshold of what it is destined to become. The laboratory is striking ahead in its exploration of new fields. Timbers which once had little more value than weeds are now made fit for substantial service to mankind. The laboratory did not blaze the trails in this exploration, but it is rounding up results. Some of the old methods and materials which have been proved to possess little value have been replaced by others. Cheap woods are fitted to take the place

once occupied by the more expensive, leaving those of great value to fill higher places.

The waste problem is ever present to the successful lumberman; he cannot get away from it. Very much must yet be done before the problem, with all its ramifications, can be solved, but the laboratory has attacked it, and with success in many particulars. Take as an example paper making from southern yellow pine. It is well known that enormous quantities of that wood are wasted, and popular belief has been held that paper of a substantial grade could not be made of that material. The laboratory installed a small paper mill, employed practical paper makers, and went to work on the problem. It demonstrated the practicability of manufacturing strong, tough, serviceable paper from yellow pine. The wearing properties of the product are excellent. Its color disqualifies it for book and newspaper work, but it is suitable for bags, wrapping paper, colored envelopes, and for many other purposes.

Another line of investigation has been undertaken by the laboratory, promising valuable results to the lumber interests in general, but particularly to engineers, architects and builders. It concerns the physical properties of American woods, strength, stiffness, toughness, elasticity and hardness. No thorough, systematic and uniform work has ever been carried out along that line for all the important woods in this country. Investigators have worked at it piecemeal, and figures obtained by one differed from another's because based on different conditions. The laboratory started at the beginning, and is producing figures uniform and accurate. There will never be occasion to do it over.

The examples cited indicate the lines along which the laboratory is doing its work, but do not by any means show the full scope of its activities. The men are thoroughly trained in scientific methods, and each is a specialist in his particular work.

A good many lumbermen are too much inclined to believe that there is nothing more in their business for them to learn; but many of the most practical problems are only half solved. A closer working relationship between lumbermen and the laboratory would unquestionably bear good fruit. A full and free discussion of troubles, suc-

cesses, failures, and achievements would lead to valuable results. The lumbermen's experience and observations, combined with the scientists' knowledge of natural laws and applied mechanics, would doubtless, in many cases, lead to satisfactory solutions of some of the problems which have long vexed the lumber industry. The laboratory is maintained by the government at great expense for the benefit of those engaged in manufacturing and using forest products.

Standardizing Lumber for Furniture Making

Charles F. Kade in an article in *The Furniture Manufacturer* for October points out to furniture producers the desirability of establishing standard sizes in the manufacture of their product. The writer calls attention to the fact that many manufacturers in different lines of industry are getting together and standardizing their products so that designs, sizes, material and price-lists are all standard. He cites as examples the following industries: Glue, screws, nails, lumber, glass, sandpaper, mirrors, art glass, iron, steel, copper, tools, electrical supplies, motors, machinery, carpets, rugs, clothing, hats and shoes. Many other examples might be added to this list.

UNSOLICITED TESTIMONIAL

The Royer Wheel Company

Manufacturers of
Vehicle Wheels

Aurora, Ind., Oct. 15, 1912.

HARDWOOD RECORD,
Chicago, Ill.

Gentlemen:

We certainly read each issue of *Hardwood Record* closely, and have gotten a great deal of benefit from these columns. We would feel lost without it.

THE ROYER WHEEL COMPANY,
J. H. Wilder, Supt.

Mr. Kade states that in the furniture business, such as chairs, sideboards, china closets, bookcases (excepting sectional bookcases), desks, parlor furniture, refrigerators and almost everything else, there seems to be no standard at all as far as design, material, measurements and finish are concerned, save that a chair seat is a certain height from the floor, and a bed is made of a certain length and width.

The only woodworking lines he knows of that have standards are the manufacturers of packing cases, wash-tubs, pails, barrels, coffins, caskets and sectional bookcases. To this specific list might be added wagon material, and generally table manufacturers have established approximate uniformity in sizes for their work.

It is generally regarded that about twenty-five per cent of the cost of the average piece of furniture is involved in the lumber that goes into it, and it is fully believable that if the furniture trade would standardize its sizes so as to enable lumber manufacturers to produce specific sizes, knowing they would have a certain demand and hence a substantial market value, they could materially reduce their price. Today it is not safe for a millman to over-produce a single item of dimension material for the furniture trade, for the reason that it may not fit the demands of any other manufacturer. Hence, in getting out a specific bill for one manufacturer a larger price must be demanded for it than if the material were standard and would sell to any of a hundred manufacturers.

There is no good reason why ninety per cent of the furniture produced in the United States should not be made to standard sizes, and why a lumber manufacturer should not be able to produce these various sizes in quantities at a distinct economy to both himself and to the consumer.

The writer above noted says that from a manufacturing viewpoint it would simplify production materially if every bed were built to standard heights, widths and lengths, and every desk to a certain standard length, like four feet, four feet-six, five feet, five feet-six and six feet, all of the same uniform height and width, say three different widths—low-top, medium and high top, but all the same, no matter what factory made them. He says every show-case, floor case, wall case, shelving section, partition, etc., could be produced by standard dimensions; that every table of a certain size should have the same standard, and furthermore he argues that factory colors and finish should be evolved to some standard; and the hardware and trimmings be made as nearly uniform as it is possible to standardize. He argues that the way to bring this desideratum about is through associations in the particular line in which the manufacturer is interested, and that every member should advocate "standardization" at each meeting.

This argument for standardizing furniture and establishing standard sizes of materials entering into its production has been a pet argument of *HARDWOOD RECORD* for years, and it is therefore only too glad to note that the furniture men and periodicals are taking up this important and eminently desirable subject, which spells not only economy, but much higher efficiency in furniture production.

In Glass Houses?

A traffic expert was recently going over the records of mis-weights on lumber shipments when, coming to a statement of underweights, he laughed and said that the railroads would receive no notification of such error. A few minutes later, however, he launched upon a heated tirade concerning the atrocities of the roads in connection with overcharges on freight. While records show that undercharges are much less frequent than overcharges, the aggregate undercharge by the various important freight carrying lines of the country amounts to considerable money. Many traffic managers see no wrong in taking from the railroads what they as carriers are legally entitled to, but when the shoe is on the other foot these same men are righteously indignant and will believe nothing less than that the roads are maliciously and intentionally doing everything in their power to beat shippers out of as much extra change as possible by means of false weighing, false tare, etc.

Equally unscrupulous shippers employ other methods of "putting

one over" on the railroads. Misstatement of classification, as in the case of a certain furniture manufacturer who deliberately concealed pianos in the middle of a carload shipment of furniture, is one way of "doing" the railroads and getting around the law at the same time, but it is doubtful if the traffic manager responsible for such practices fully realizes the serious consequences if they are discovered. Nor is it likely that he is aware of the fact that he puts himself liable to federal prosecution if he accepts a statement of freight charges showing underweight.

It is pretty generally known that most of the large railroad systems in the country are in the business to make as much as possible out of it, and therefore they have undoubtedly done a great deal which has not been in exact keeping with the most honest methods of competition. On the other hand, however, these systems are made up of human beings who appreciate as well as others the value of fair treatment. The country-wide protest against wrongful methods of car weighing is based on positive facts, but it is doubtful if these practices by the roads are sufficient justification for the employment of similar retaliatory methods by the shippers. In fact such action has the tendency to morally weaken the shippers' cause and for this reason, if for no other, shippers should make every effort to maintain a position of absolute fair dealing toward the carriers.

The Safety of the Passenger

The Wall Street Journal, in its issue of October 15, says that in criticizing the use of mixed trains of wooden and steel cars on fast express trains and the calamitous fire arising from that reason in the recent accident on the New Haven road, it willingly recognizes that operating difficulties are of a kind which cannot be settled off-hand. Railroad rather than lay experience is necessary in revising the present methods of handling express passenger service. One of the ablest and most experienced railroad officials in the United States writes this publication as follows:

I understand no official investigation of the causes of this accident has yet taken place. I beg to suggest therefore that until such investigation has been held it is unwise to assume knowledge as to the causes. I beg to suggest also that if the cars had been lighted by electricity instead of by gas, there would have been no loss of life by fire, and that in all probability the loss of life and injury from other causes would have been fully as great in a steel car as in a well-constructed wooden car. As a person of some experience, I am prepared to state that in a train heated by steam and lighted by electricity, I would prefer to take my chances in a collision or other wreck in a thoroughly well built wooden car with steel underframe than in a car composed entirely of steel, and I think railroad men in general share this opinion. The cars of steel for the fore part of the train should, perhaps, be made of steel because of the possibility of fire being communicated from the engine in case of wreck; but the other cars of the train are very much more comfortable and quite as safe if properly constructed of wood with steel underframes. When to this is added the very much larger first cost and the enormous enhanced weight of the steel car, their general use seems to be of very doubtful benefit.

The Pennsylvania Railroad is about the only line left that still continues the building and use of entire steel cars, and this is apparently done purely as an advertisement for the alleged fireproof qualities embraced in total steel car construction and for its steel and concrete tubes under the Hudson river, New York City, and the East river. Sad to relate, a few days ago a car of express matter caught fire in one of the Pennsylvania tunnels in New York and produced a first-class conflagration, suspending traffic in the tunnel for hours.

It will readily be seen that it is absolutely futile to build fireproof tunnels and transport through them fireproof cars that are loaded with combustible materials, and insure freedom from fire. A fireproof car is no more fireproof than the contents are fireproof.

The Pullman Car Company and nearly all the other leading passenger and sleeping car builders have gone back to the steel underframe and solid wood construction in passenger and sleeping cars. As a matter of fact, the Pullman Car Company has bought more solid wood and veneer during the past year than during any previous year in its history. The craze for the steel passenger and sleeping car is apparently over, which is a desideratum for which both the railroads and the traveling public should be devoutly thankful.



Pert, Pertinent and Impertinent



THE EUCALYPTUS BUBBLE



Both Tired

Patron—"Say, look here, I'm tired waiting here."

Waiter—"So am I, sir; let's go to some other restaurant."

Matrimonial Amenities

Mrs. Knagg—"When I die you'll never find another woman like me."

Mr. Knagg—"No, for I don't intend to look for one."—*Boston Evening Transcript*.

A Bad Mistake

"That young lady is angry with me. The episode happened at a reception. I couldn't see her face under her big hat."

Nearly Ready to Burst

"And you mistook her for another young lady, eh? Nothing in that to get mad about." "I mistook her for a piano lamp."

Unknown Quantity

Knocker—"Is your boy at the head or foot of his class?"

Bocker—"He's like champagne—will go to either."—*Judge*.

Mutual Distrust

"That new statesman is giving you quite an argument."

"Yes," replied Senator Sorghum. "It's the same old story. He thinks we need reformation, and we think he needs information."

Most Annoying

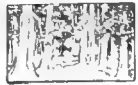
"It's fearfully annoying to lose all your money on a get-rich-quick scheme," said Mr. Silliwad.

"Yes," replied Mr. Lambkin. "Such a disappointment to find the most enticing propositions coming along after you have wasted all your available coin on a back number prospectus."—*Washington Star*.

What the Handsaw

The handsaw wood while the bucksaw dust, The bandsaw snakes while circulars bust, The hacksaw nails while the jigsaw fret, But the seesaw all that and more yet.

—W. D. Graves.



American Forest Trees



NINETY EIGHTH PAPER SILVER OR SOFT MAPLE *Acer saccharinum* Linné

The names silver maple and soft maple are applied to this tree in nearly all parts of its range. The first name refers to the bright underside of the leaves, and is used by those who speak of the tree as it stands, either as an ornament along highways or in parks, or in its native woods. The name soft maple refers to the wood, and is a lumberman's term. It is applied to the standing tree and to the lumber made from it. In many parts of its range it is called white maple, because the trunk is largely sapwood, except old specimens, and the wood is whiter than that of sugar maple. Many persons doubtless have in mind the color of the underside of the leaves when they speak of the tree as white maple. Three or four other names are applied, referring to the localities where the trees usually grow. Among these names are river maple, creek maple, water maple, and swamp maple. These names are used oftener in Pennsylvania, Maryland and West Virginia than elsewhere. The species is at its best on rich bottom land where water is abundant and soil fertile.

The range of silver maple extends from New Brunswick through southern Canada to the region of the Great Lakes, thence through Michigan, Wisconsin, Minnesota, to South Dakota. West of the Mississippi river it grows southward to Oklahoma; its southern limit reaches Florida. It is not abundant on the immediate Atlantic coast, but is of considerable importance among the Appalachian mountains and westward in the Ohio valley.

Next after sugar or hard maple it is the most important maple species. Figures which show the annual use of the two maples in four states will indicate their comparative importance:

Sugar maple. Average		
	feet.	price.
Michigan	333,724,000	\$17.53
Illinois	101,487,000	27.04
Kentucky	1,814,000	13.47
Missouri	3,196,000	34.71
Soft maple. Average		
	feet.	price.
Michigan	13,659,000	\$20.73
Illinois	21,785,000	11.33
Kentucky	3,212,000	8.13
Missouri	4,603,000	24.98

The above figures are from reports by the United States Forest Service. It appears that the comparative importance of the two maples changes from the North toward the South; the sugar maple loses and the soft maple gains.

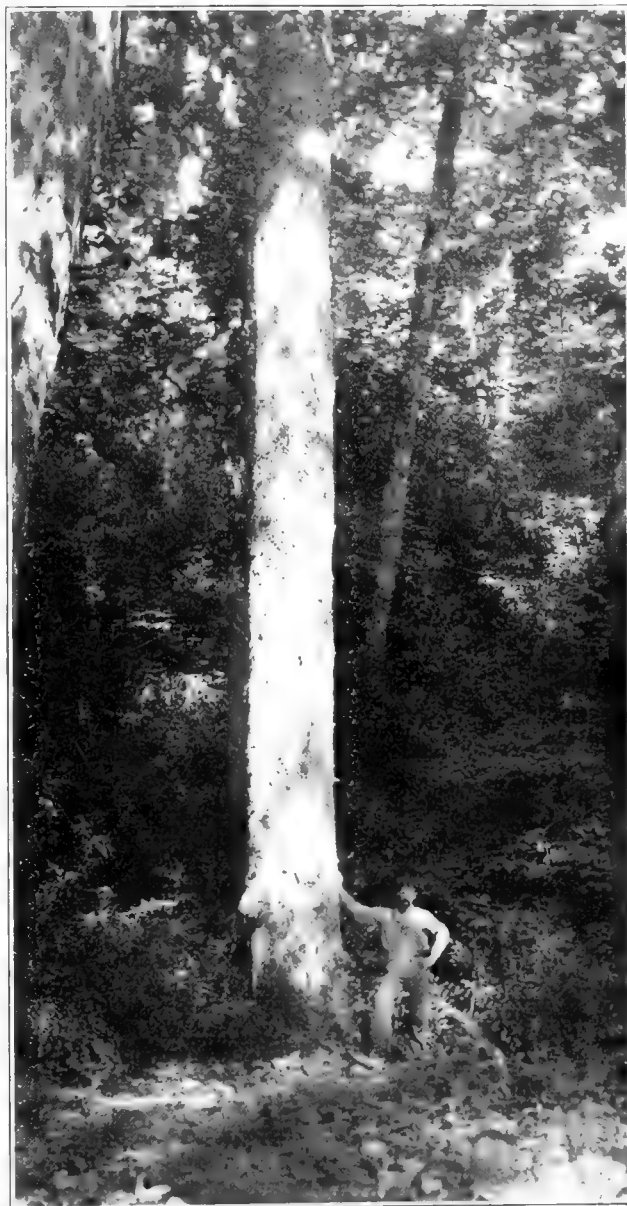
The red maple (*Acer rubrum*) and Drummond maple (*Acer rubrum drummondii*) bear much resemblance to soft maple, yet there are several distinguishing features. The leaves of soft maple have five lobes; red maples have three. The small twigs, bloom and fruit of red maple are red; those of soft maple are not, the flowers

being greenish yellow. Few trees ripen their fruit in a shorter time than soft maple. It blooms during the first warm days of spring; and the key-shaped fruit soon follows, reaches maturity quickly, and is scattered by the wind before the earliest leaves appear on the tree. The seeds have very strong wing power and fly long distances. As they whirl through the air in their descent to the

ground, they look like gauzy wheels three or four inches in diameter. They germinate at once if they light on damp ground, and young trees are under way before the heat of summer strikes them. Most of them are doomed to die, because they come up in such multitudes that nearly all are crowded to death. For many purposes soft maple is considered inferior to sugar maple. It is of faster growth, and the wood is weaker and more brittle. It weighs 32.84 pounds per cubic foot; sugar maple is eleven pounds heavier. Trees of the two species reach similar sizes, but soft maple attains maturity many years earlier than the other. The wood is pale brown, the thick sapwood whiter. Small soft maples often have no heartwood; but at the age of fifty or sixty years it begins to form.

Branches of sugar maple are seldom broken by the wind; those of soft maple often are. They are so brittle that when they snap they seldom hang to the stubs, but fall to the ground. This constitutes a serious defect in soft maple as a street or park tree. Before it has reached middle life it has become ragged and lopsided. The trunk is apt to become defective at the same time, and a symmetrical, healthy soft maple street or park tree eighteen inches in diameter is unusual. Notwithstanding these drawbacks, it is extensively planted. It is a beautiful tree when quite young, and at that stage it appeals to purchasers of nursery stock. Half a dozen varieties have been developed by cultivation. The autumn foliage of soft maple is yellow, and it falls far short of presenting the fine appearance of the brilliant red leaves of sugar maple.

Lumbermen are interested in soft maple chiefly as a forest tree and a source of lumber supply. The statistics of sawmill output in the United States do not separate the maples, and the total yield only is given. That in 1910 was 1,006,637,000 feet, and probably ten per cent of it was soft maple. When great strength and hardness are essential, the woodworker seldom chooses soft maple when sugar maple is obtainable; but the softer wood is suitable for many purposes. The most trying place in which it is used is for flooring, including parquetry. It is low in wearing qualities,



TYPICAL FOREST GROWTH S. OFT MAPLE. LOWER APPALACHIAN REGION

but its white color recommends it, particularly when it is placed in contrast with darker woods. It is one of the best hardwoods for boxes, and possesses in a high degree three requisites: strength, whiteness, and freedom from stain and odor; a fourth, comparative lightness in weight, may be added. Much of the wood is worked into veneer packages and containers for berries and small fruits. Furniture manufacturers pick it out for several purposes. It looks nice when made into baby carriages, carts and children's sleds; and the makers of certain patterns of hall clocks like it. It serves well as parts of chairs, piano benches, book cases, filing cabinets and kitchen cabinets.

Makers of ice boxes and refrigerators give it a place because of its clean appearance. It is manufactured into broom handles and appears to equal hard maple in every way, but objection to it is sometimes heard from broom makers because it is not heavy enough. Brooms are often sold by weight, and if the handle is light, enough broom corn must be put in to make up the difference, and, weight for weight, broom corn costs more than wood.

It is a standard material for woodenware of certain kinds. Ironing boards and sleeve boards are made of it, also butter bowls, root cutters, potato mashers, rolling pins, washboards, and many similar articles.

It is manufactured into interior house finish, including balusters, stair railing, newel posts and spindles; parts of musical instruments, such as organ pipes, piano and mandolin ribs, rims of guitars, and parts of sounding board equipments. Makers of business vehicles employ it for shelving in bakers' and butchers' wagons.



LEAF PRINT OF SILVER OR SOFT MAPLE:
ABOUT ONE-HALF ACTUAL SIZE

Soft maple wood contains multitudes of very minute pores which are visible only under a magnifying glass. The glass further shows that the medullary or silver rays of the wood are exceedingly thin. For that reason, quarter-sawn soft maple does not present the silvery appearance of quarter-sawn sugar maple, in which the medullary rays are much broader, and it is possible to exhibit much more of their surface.

Soft maple sometimes exhibits a highly artistic curly or wavy effect. The old-time hunters used to search far and wide to find such a tree, and made stocks of it for their long-barreled rifles. The wood was no more serviceable than plain maple, but the curly effect caught the backwoodsman's eye and he exhausted his utmost skill in scraping and polishing it to bring out the artistic figure. Some of those old gunstocks, though soiled by the grime and smoke of a century, are as fine samples of woodworking as can be found anywhere.

The supply of soft maple has always been sufficient to meet the demand, and there is no immediate danger that scarcity is at hand. It cannot be classed among the so-called indispensable woods, like hickory. A good many can take its place when it runs short. It could be easily grown as a forest tree or on wood lots, but no beginning seems to have been made in that direction, although large numbers of soft maples have been planted for ornamental purposes. Few forest species of this country can be more easily planted and made to grow. It is said to cost nurseries as much to raise one sugar maple to size for transplanting as ten soft maples, which is probably one reason why soft maples are planted so much more extensively than others.



Uses and Supply of Kauri Pine



The kauri pine (*Agathis australis*) is the finest tree in New Zealand, and produces the most valuable timber. The native name "kauri" is the only common name given to this tree, but in the English and American markets it is sometimes called "cowrie" or "kowdie" pine. It is not a pine at all, but is more closely related to *Araucaria* than it is to *Pinus*. It is closely related to and resembles the Norfolk Island pine, which is familiar in this country as a house plant. Kauri is restricted to the northern part of the North Island, where large forests of it occur and afford one of the most impressive scenes in New Zealand. The tree attains the height of 120 to 160 feet and upward; clean, symmetrical trunks may be seen from 50 to 80 feet or even 100 feet in length, varying from 5 to 12 feet and upward in diameter. The wood is esteemed above all other New Zealand timber for masts, spars and other purposes in naval construction, which first led to its being exported for use in the British dockyards.

Formerly its use for general building purposes was confined chiefly to the North Island, and its durability for this purpose has been thoroughly proved. Logs that have been cut and left in the forests showed a perfectly sound heart-wood after thirty years. Weather boarding is in many cases in use for more than thirty years without showing any signs of decay. Some of the oldest houses in the city of Auckland and in other parts of the island are built of this wood and many of them are in a good state of preservation. Kauri pine has been employed, together with totara (*Podocarpus totara*), for the upper beams were in good condition after eighteen years' use. It has also been used extensively for bridge timbers with the best results. Its superiority over Tasmanian blue gum (*Eucalyptus globulus*) under heavy wear and tear has been demonstrated by the use of both timbers for

wharf construction, when the former was found to last twice as long as the latter under severe tests. Crossties after from five to nine years' use were found to be in good condition.

Kauri is undoubtedly the best timber in New Zealand for general building purposes. It is largely used for crossties, telegraph posts, mine props, masts, and deck planking of ships, for which it has no equal, being even-grained, free from large knots, is of smooth surface and resists a large amount of wear and tear. It is also used extensively for the outer and inner planking of coasting boats. Kauri affords a splendid timber for interior finish, as it takes a high polish and is especially adapted to all the purposes of the cabinet maker where light colored wood is required. The common kind of kauri wood is excellent for ordinary grades of furniture. The finest figured wood is equally as valuable as bird's-eye maple and is highly prized for ornamental work.

A steady export of kauri pine was formerly carried on, chiefly with Australia, Tasmania, Mauritius, and England; it was, in fact, the only New Zealand timber exported to any extent. It is significant alike of its intrinsic value and of the abundance in which it originally occurred in the limited area to which it is confined, that the export of kauri timber was so great that it exceeded the total export of all other timber from all parts of New Zealand. About the year 1875 the demand for this wood suddenly began to increase and in 1885 the quantity exported amounted to over 30,000,000 board feet. This enormous drain on the kauri pine timber, together with the destruction of the forests by fire, so greatly lessened the available amount of timber that there is little if any of this valuable timber sold for other than home consumption.

L. L. D.



LITTLE RIVER RAILROAD AT CROSSING OF FORKS OF MAIN RIVER



A Remarkable Logging Railroad



What is probably the most remarkable standard gauge logging railroad in the world is the Little River railroad, and its connection, the East Prong railroad, of the Little River Lumber Company of Townsend, Tenn. This road is located in the Great Smoky mountains in Blount and Sevier counties, Tennessee, and is employed to transport logs from the mountains to the sawmill operations of the company at Townsend, and for the delivery of its lumber from Townsend to the Southern railway at its connection with that line at Walland, Tenn., and also for a general and miscellaneous passenger and freight business between Walland and Elkmont.

The Little River Railroad is an incorporated company and a common carrier between Walland, Tenn., and the three forks of the Little river, four miles southeast of Townsend, where it connects with the East Prong railroad, owned by the Little River Lumber Company, and extends from this connection up the east prong of the Little river to the three forks of this branch, a distance of twenty-four miles, making in its entirety a main line proposition of thirty-five miles with numerous spurs and sidings, involving altogether fifty miles of track now in service.

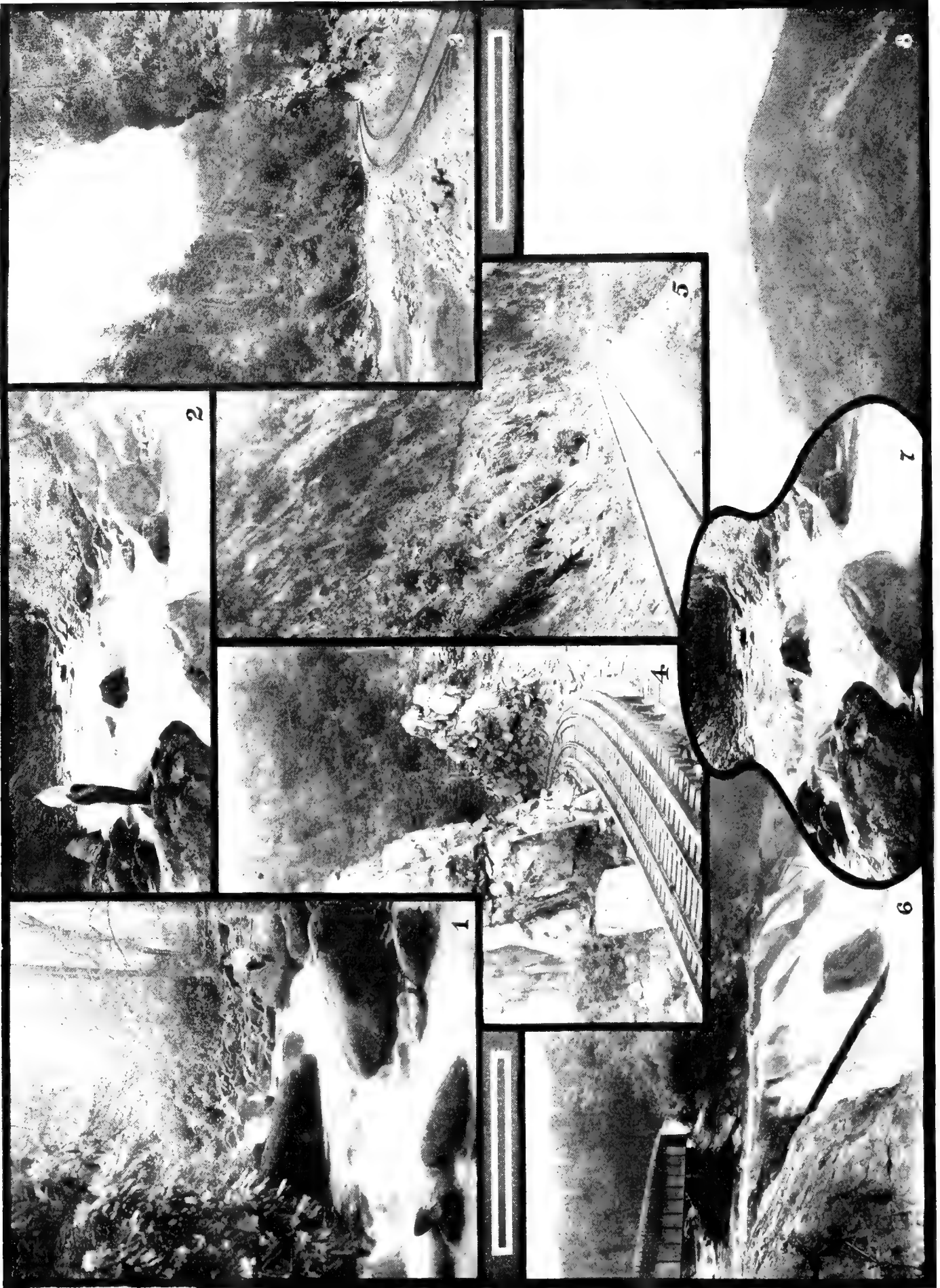
Some idea of what would be regarded as a tremendous expense for a logging railroad may be had when it is stated that the cost of the eighteen miles of road through the gorge of the Little river alone involved an expenditure of approximately twenty thousand dollars a mile, or a total of \$360,000. A cost like this would seem appalling to the average sawmill operator, but W. B. Townsend, the president and presiding genius of the Little River Lumber Company, realized the long-time service his company would require of the road, and

knew the quantity and high value of the timber lying above the gorge. Hence he built a railroad that would carry his logs long distances at a minimum of operating cost. It may be noted that this accomplishment is manifest from the fact that trains of as high as twelve logging cars, carrying from 7,000 to 9,000 feet to the car, are daily hauled from Elkmont, Tenn., to Townsend to stock the big double band mill at that point. Besides this, large quantities of bark and other forest products are handled.

It has been demonstrated that the sanity of this type of railroad construction has been fully verified, from the fact that the big double band mill of the company, which cuts upwards of 80,000 feet of lumber every ten hours, is always stocked with logs, which is a rare condition with mills where logs are obtained on steep mountain slopes.

The grade on the first twenty-six miles, i. e., from Walland to Elkmont, is not excessive, its maximum being two-and-a-half per cent. However, the road is built through a narrow mountain gorge along the Little river, which makes it a most picturesque piece of railroad. Its building necessitated excessive curvatures of the most difficult construction, so much so that strictly professional engineers, after careful surveys, would not lay out the road unless permission was given to tunnel the mountains at several points.

Mr. Townsend, in speaking of the enterprise, says: "As a matter of fact, the gorge of the Little river, along which the railroad runs, was too narrow to afford reasonable room for the river itself," and with a wink further observed that "no one but a dunce would have ever undertaken its construction, inasmuch as room had to be provided for both the river and the railroad." Mr. Townsend wished to



SCENIC FEATURES OF THE LITTLE RIVER RAILROAD
 1—The Narrows; 2 Where the rainbow trout abound; 3 Big London Rock; 4 The cut through the Long Arm of Curry Ho; 5—Where solid rock was blasted to make room for the railroad; 6—The Sinks; 7 Little White Horse Rapids; 8—Clingmans Dome from top of Silvers Bald

avoid the tremendous expense incident to tunnel building, which resulted in some spectacular railroad construction. For example: At the cut through the "Long Arm of Curry He," shown in one of the accompanying pictures, it was necessary to reverse two thirty-four degree curves on a substantial grade, without any intervening tangent (which, as railway engineering is taught, is an impossible railroad proposition) in order to get around the point of the mountain and cross the river. There are two thirty-six degree curves on the main line, which is the maximum curvature. This excessive curvature required special motive power. The ordinary direct-connected locomotive would not take the curves, and the distance involved was too great to operate geared locomotives economically or successfully, which resulted in the company's having designed specialallet-type locomotives, which were built by the Baldwin Locomotive Works, Philadelphia, and which have performed the service most satisfac-

As before noted, the Little River railroad starts at Walland, Tenn., which is at the end of a ten-mile plug of the Knoxville & Augusta railroad, a branch of the Southern Railway, extending from Marysville, Tenn. Marysville is eighteen miles southeast of Knoxville, where the main line of this division starts. Direct connections are made for Little River railroad points with through service trains on all divisions of the Southern reaching Knoxville.

In connection with this article are several pictures illustrating but inadequately the marvelous picturesque features of this lumber and logging railroad. In rare beauty the scenery along the line can scarcely be surpassed by any of the famous scenic routes in the country. It is only within the last few years that even the residents nearby Knoxville and other cities have learned of the wonderfully alluring features of this Great Smoky region, and especially along the route of the Little River railroad. Now they are taking advan-



"THE NARROWS" OF LITTLE RIVER, ALONG WHICH THE RAILROAD RUNS

torily. The bridges on the main line are all of steel construction, with concrete piers and abutments. Attractive station houses or shelters are provided at all the stations along the line.

The motive power of the railroad consists of oneallet-type engine, three Shay geared locomotives, one special direct-connected locomotive and two other direct-connected locomotives, seven in all.

The rolling stock comprises twenty-eight 80,000-pound capacity logging cars; seven 60,000-pound capacity flat cars; three 60,000-pound capacity service cars; two passenger coaches; two observation cars; and one automobile speeder. This rolling stock was specially designed and constructed so as to take the excessive curves, provisions being made for a very wide swing of the coupling device.

The entire road is standard gauge laid with sixty-pound steel. It is rock ballasted, has oak ties, and compares favorably with the construction of any first-class trunk line railroad. The geared locomotives are operated above Elkmont, where the curvature often exceeds thirty-six degrees, and involves grades as high as ten per cent.



PLANK LOG SLIDES BY MEANS OF WHICH LOGS ARE MOVED TO RAILROAD

tage of both the railroad and its several summer resort hotels and club-houses scattered along the line, and thousands of summer residents and excursionists are transported over the road to various points for rest and recreation during the entire summer season. At Sunshine, near Walland, are many cottages privately owned, and others are maintained by some charitable organizations of Knoxville as a place for recreation for working women and children. Nineteen miles above Walland near Lyon Springs is a well patronized hotel and medicinal spring. Near Elkmont is a fine club-house belonging to the Appalachian Club, and surrounding it is a score or more of attractive cottages. Near this station there was also built this year a large hotel known as "Wonderland," which overlooks a wide stretch of mountain country, and which already has become very popular for health and pleasure seekers.

For several summers the editor of HARDWOOD RECORD has had a tent encampment at the very farthest end of the main line of the railroad, just above the three forks of the east prong, and ex-



LOADING LOGS DELIVERED BY SLIDES TO CARS

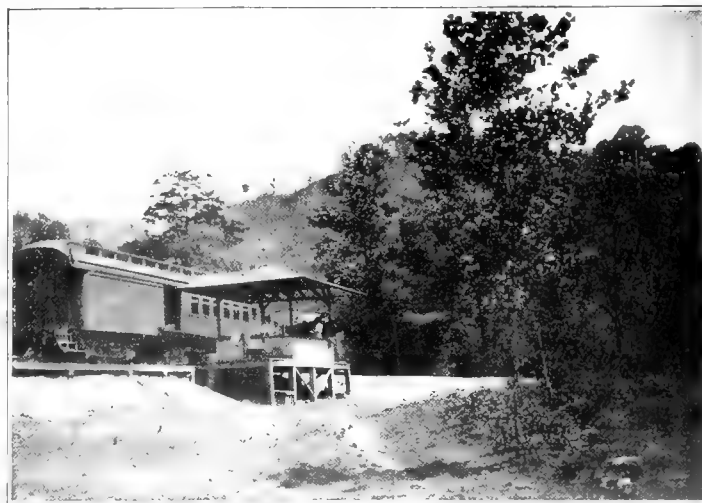
pects early next spring to build a comfortable lodge at this point to supplement his tent equipment.

All the cut-over lands of the Little River Lumber Company, and a considerable area of undepredated land, involving spruce and balsam tops of the mountains, something like 55,000 acres, is under contract to the United States government as a part of its Appalachian National Forest. It is more than likely that the remainder of the property also will be taken over by the government as soon as the company takes out its large merchantable timber. Under the terms of this sale, present owners of small tracts within the boundary are left in undisputed possession of their holdings. The plans of the Forest Service involve a regrowing of the forest and the protection of the entire area from fire, thus making provision for the maintenance of an equitable stream flow of rivers which have their sources in this region.

While primarily this national forest is not intended as a playground for the public, beyond question certain sections will be set aside for this purpose, and any American citizen who so desires will have an opportunity of camping in this delightful region of pure air, sparkling springs, rushing waters, splendid trees, beautiful flowers and singing birds. It is expected that, with the eventual conclusion of the logging operations of the Little River Lumber Company, which will probably consume twenty years or more, the main line of the Little River railroad will be taken over by the government or some private corporation, electrified and be continuously employed as a means of ingress and egress to this picturesque and alluring section of the country.

It is a singular fact that this most charming region of the United States and its delights as a summer resort are almost unknown to even the inhabitants of the nearby cities, many of the residents of which travel long distances seeking places for rest and recreation. At the four thousand feet level, which has already been attained by the terminus of the Little River railroad, the summer temperature ranges from a minimum of forty-five degrees to a maximum of seventy-five. The air during every hour of both day and night is invigorating and refreshing, without being either too chilly or too warm for perfect comfort. Again, the region is free from all insect pests. Hence, it is that the writer, after traversing practically every wooded area of the United States, has chosen a sylvan retreat in Sevier county, east Tennessee, as the most charming and alluring spot in the country that could be selected for a summer home.

Food products of surpassing character are readily obtainable, and while small game is well nigh exhausted, this fact is compensated for by the plentitude of both speckled trout in the upper streams and rainbows in the lower reaches of the river. On the mountain tops, from five to fifteen miles from the present end of the railroad, a considerable number of bear and some deer and wild turkey still abound. For the hunting sportsman the region offers but small attraction, but for the fly fisherman it is exceedingly alluring.



APPALACHIAN CLUB STATION AND PARK

Many pictures depicting the features of this region have appeared in *HARDWOOD RECORD* during several years, and the few that are published in connection with this article are used simply to illustrate the features of the Little River railroad and the scenic beauty along its route.

To the skill and hard work of Superintendent J. P. Murphy of the Little River Railroad its owners are largely indebted for its admirable construction and faultless operation. H. H. G.

To Prevent Water-Logging

Practically every stream in the country, which has been extensively used for floating logs, has claimed a heavy toll in sunken timber. Deep holes, lakes, ponds and harbors in many regions have their bottoms strewn with saw-logs which became water-logged.

A recent article in the *Trade Journal of Calcutta, India*, describes a method by which it is claimed timbers may be prevented from becoming water-logged. As it is not expensive, it might be worth trying in this country. The article says that the hill forests of the United Provinces and the Punjab hold very extensive stores of spruce with which is associated the well-known silver fir. The trees grow to a very large size, with a girth of 20 feet, and a height of 200 feet is by no means uncommon.

The vast forests in which these trees are found are generally situated far from the plains at a high altitude. They are thus very inaccessible, and the only possible means of getting the timber out to the markets is by floating it down the rivers. Unfortunately this has hitherto not been found possible as the wood, though light and weighing only thirty or thirty-two pounds to the cubic foot and floating easily even in a green state, is porous and in water quickly becomes water-logged and is lost. During the last few years many experiments have been made in the Punjab and Northwest Frontier Province with a view to ascertaining how the timber can be prevented from becoming water-logged.

Mr. Barker, deputy conservator of forests, found that by dipping the ends of sleepers (which had been cut and allowed to season for twelve months) in hot coal tar, the loss from water-logging can be practically prevented. Of 223 broad-gauge sleepers treated in this way, launched into the Kaghan river and floated to the Jhelum depot, only four were lost, whereas out of 331 untreated sleepers 132 were lost. The treatment is very cheap, and this discovery should prove of the greatest importance and may render it possible to work out the timber from the high hills of the western Himalayas. Further experiments are in progress, but there seems no reason to doubt that, given a period of seasoning, the treatment by hot coal tar will prevent the loss by water-logging of spruce and silver fir whether in scantling or in the log.



An Object Lesson in Utilization



As pointed out in a recent issue of *HARDWOOD RECORD*, one of the ways in which the participation of the government in the timber business helps private interests is in the object lessons afforded. The government is in a position to conduct experiments and put theories into practice which private concerns are hesitant to do.

A case in point is in the construction and operation by the United States Indian Service of a large band sawmill and planing mill to cut timber belonging to the Menominee Indians. This plant, which has an eight-hour capacity of 120,000 feet, was constructed during the fall of 1908 at Neopit, Wis. The area of the Indian reservation is 230,400 acres and the stand of timber is estimated at nearly two billion feet board measure. About two-fifths of the stand is hemlock, one-sixth each of basswood and sugar maple, one-tenth white pine, and the rest elm, yellow birch, white and red oak, white ash, beech, aspen, Norway pine, white cedar, balsam, tamarack, and white spruce. Only the mature and fire-damaged timber is logged, and the cut is so regulated that the productive capacity of the forest is not impaired and operations may be kept up indefinitely.

One of the most important phases of the work is the development of a great many lines of uses of minor products. When it is realized that the average amount of wood material actually utilized in the average operations is less than forty per cent of that grown in the woods, the importance of more thorough utilization seems obvious. The usual reply of the operator is that there is not sufficient demand or market for the material, or that the transportation facilities are so poor that the cost of placing the wood on the market is prohibitive; in other words, it doesn't pay.

From a report by N. C. Brown recently published in the *Forestry Quarterly* it appears that the methods of utilization employed by the Indian Service do pay. The minor products discussed in some detail as to costs and profits are: hemlock bark, cordwood, lath, shingles, crating material, basswood and popple bolts for excelsior; pine bolts for pail stock; ties, cedar poles and posts, and picket stock. The following are a few examples:

CORDWOOD

The operation pays eighty cents a cord to the Indian contractors for cutting. Everything from sixteen inches to forty-eight inches in length is taken and all cordwood over ten inches in diameter is split. The contractor cuts up only the tops and dead and down material left in the woods after logging, and no stumpage is charged for this material. "A face cord" in this region equals a stack of wood four feet high, sixteen inches wide and eight feet long. Both this short sized wood and the regulation four-foot cord lengths are commonly sawed. It costs on an average of sixty cents per cord to haul to the tracks and load on the cars. The operator receives from two to three dollars per cord f. o. b. at Neopit, depending upon the character of the wood; three dollars per cord is received for maple and birch sound body wood, that is, clear material free from knots or defects. All other hardwoods bring two dollars per cord. The more valuable cordwood is used for special kiln and charcoal work. The profit on this class of product is therefore very high. About two thousand cords were sold during the past year, yielding a profit of from sixty cents to one dollar and sixty cents per cord. This market is just being developed and as the quantity consumed by the market is almost unlimited, the cuttings of this product can be increased in very much larger quantities.

LATH

As the slabs, trimmings, etc., come from the slasher they are picked first for lath, then for picket stock and last for crating and box material. All species go both into lath and board material, but only pine and basswood are used for picket stock. The average cost of lath per thousand is \$1.34. Average sales are \$2.34, giving a profit of one dollar per thousand. The average cost includes manufacturing, yarding, shipping, sales, insurance, etc., but no stumpage, inasmuch as that is taken care of by the lumber product. The annual output is about 10,000,000 lath.

BOX BOARD AND CRATING STOCK

All species are used for crating stock. Slabs, edgings, and any defective logs which when sawed will hold a nail are used after first being picked over for lath and picket material. The average cost of manufacturing, yarding, shipping, etc., etc., including sale expenses, depreciation on machinery, etc., is \$1.65. The average price received is two dollars per thousand pieces, giving a net profit of 35 cents per thousand. No charge is placed against stumpage, since that is taken care of by the lumber obtained from the logs. The annual output of the mill is about 4,000,000 pieces of box board material, which vary in size according to order.

BASSWOOD AND POPPLE BOLTS FOR EXCELSIOR

Basswood bolts cost three dollars per cord to cut, make, peel, and pile in the woods. A cord is considered a stack four feet high, eight feet long and fifty-four inches wide. It costs from fifty cents to one dollar per cord to haul out of the woods and load on the cars, depending upon the length of the haul, which varies from one to three and one-half miles. The price received is \$7.50 per cord f. o. b. at Neopit, giving an average profit of about \$3.75 per cord.

Popple bolts are made for \$2.50 per cord unpeeled, or \$3.50 per cord, peeled and delivered at the tracks for these prices. These bolts come in two lengths, 37 and 54 inches; \$5.25 is received per cord for the 54-inch stock and \$4.75 per cord for the 37-inch stock. Both lengths are sold on the basis of 54-inch face cords. The average profit per cord is about \$1.50.

PICKET STOCK

This material is largely made from red and white pine and basswood. The prices received for this stock vary from \$1.71 per thousand for pieces 1 by 1 inch wide by 20 inches long, up to \$14.70 for pieces 1½ by 1½ inches wide by 48 inches long. All of this stock goes into window shade material.

Slat stock, which is always associated with window shade material, bring \$1.72 per thousand for pieces ¾ by 1½ inches by 40 inches long, and \$2.45 for pieces ⅝ by 1 inch by 48 inches long. Up to the present date the mill has not turned out a sufficient amount of picket stock on which to base any fair estimates of cost, but it is beyond question a paying proposition.

Besides the above various lines of utilization the operation is planning to turn out a special stock of maple and birch for woodenware material, and to utilize the slabs and waste of certain species for paper pulp. In addition, it will dispose of all kinds of hardwood material for chairs, tools, furniture, and special woodenware manufacturing.

MATERIAL	SPECIES	UNIT	UNIT PROFITS
Hemlock bark.....	Hemlock	Cord	\$2.14
Cordwood	Maple and birch.....	Cord	1.60
Cordwood	All other hardwoods.....	Cord .....	.60
Lath	All species.....	Thousand pieces.....	1.00
Shingles	White cedar.....	Thousand pieces.....	.53
Box boards or crating.....	All species.....	Thousand pieces.....	.35
Excelsior bolts.....	Basswood	Cord	3.75
Excelsior bolts.....	Popple	Cord	1.50
Pail stock bolts.....	White and red pine.....	Face cord.....	.55
Railroad ties.....	Hemlock, 90%.....	Piece .....	.12
Telegraph poles.....	White cedar.....	Piece	2.07
Posts	White cedar.....	Piece .....	.025
Picket stock.....	Red and white pine and basswood	Thousand pieces.....	Unknown

The above figures are intended to show the excellent profits possible from utilizing by-products of a large lumber operation. Neopit is on the Wisconsin Northern railroad, about twenty miles from Shawano. Here it connects via the Chicago & Northwestern railroad with the wood markets in the larger cities of Wisconsin. However, much of the above material, besides the lath and shingles, is consumed outside the state. Several markets have been developed in Chicago and even as far away as the central prairie states and New York, proving that the transportation and market problems are not prohibitive. The labor used on this operation is about equally divided between Indians and whites. The latter have proven to be the more efficient of the two classes.

J. R. S.

Northern Manufacturers Meet

The quarterly meeting of the Northern Hemlock and Hardwood Manufacturers' Association took place at the Hotel Pfister, Milwaukee, on Tuesday, October 22. Following the regular routine of opening, Secretary R. S. Kellogg read his report as follows:

Secretary's Report

It is very interesting to compare conditions at this time with those which existed when we met here a year ago. During the year then drawing to a close, business had been of strictly a hand-to-mouth character, and on a most limited scale. Four years of depression had run their course and left their baleful influence behind. The lower grades of lumber were being marketed throughout the country at several dollars per thousand less than the cost of production, and in many cases there was not sufficient margin on the higher grades to bring the average up to a profitable point. Production had been in excess of the demand for lumber, and a buyer's market had prevailed throughout. Some rays of hopes were visible, however, and although most of us did not realize it until afterward, a business revival had actually begun at the very time we were meeting here. Starting with the coming into the market on a large scale by the railroads for material whose purchase could no longer be delayed, the influence spread until for several months past we have been in the midst of a general trade revival. The results are evident in the figures which are presented for your consideration to-day.

CUT AND SHIPMENTS—JANUARY 1 TO SEPTEMBER 30, 1912 AND 1911.

The following comparison of cut and shipments from Jan. 1 to Sept. 30 this year and last is based upon reports from the same firms in the corresponding months:

	Cut, M ft.		Shipped, M ft.	
	1912.	1911.	1912.	1911.
January	14,666	15,396	13,733	12,369
February	24,794	21,405	18,439	12,250
March	29,907	31,456	19,413	13,543
April	28,544	33,293	18,921	13,804
May	26,643	28,644	18,423	13,077
June	17,620	26,519	20,703	19,118
July	13,645	16,411	21,731	17,263
August	11,135	13,664	29,136	22,555
September	8,188	9,244	21,588	20,855
	169,142	196,032	182,087	144,834

Decrease in hardwood cut, 14 per cent.

Increase in hardwood shipments, 26 per cent.

Reports from forty-five representative firms show a decrease of 48 per cent in unsold hardwoods on hand as compared with a year ago.

LOGGING OPERATIONS

Excellent reports upon log input and woods wages have been received from seventy-one representative firms throughout Wisconsin and northern Michigan.

LOG INPUT

The log input of the reporting firms last season and the logging planned for this winter compare as follows:

	Hardwood, M ft.
Logged 1911-12	200,304
Expect to log 1912-13	239,797

WOODS WAGES

Average woods wages per month including board at present compare as follows with reports in October, 1911:

	1912.	1911.
Choreboys	\$28.50	\$26.00
Swampers	29.30	26.40
Roadmen	29.10	27.40
Cookees	30.80	29.00
Sawyers	32.90	29.80
Hookmen	34.20	31.30
Teamsters	34.20	31.40
Barnmen	34.50	31.90
Top loaders	37.80	34.80
Blacksmiths	55.90	56.50
Cooks	66.50	64.75
Engineers	68.20	73.00

STATISTICS

Reports upon logging operations last fall indicated a decrease in log input during the winter of 10 per cent compared with the previous year which was confirmed by reports received in the spring after most firms had finished their woods work. The correctness of this estimate is further proved by the monthly statements which show a decrease in hemlock and hardwood production of 10 per cent from Jan. 1 to Oct. 1, 1912, compared with the same period in 1911. On the other hand, an increase in shipments of 31 per cent during this period amply proves the reality of the business revival, and tells clearly of a great shortage in lumber stocks. This is still further emphasized by the reports of dry stocks on hand unsold Oct. 1 this year and last. Decreases of 37 per cent in hemlock, 58 per cent in ash, 44 per cent in basswood, 39 per cent in birch, 67 per cent in elm, and 57 per cent in maple, or of 40 per cent in hemlock and hardwoods combined, are sufficient answer to any inquiry as to why lumber prices have advanced so sharply this year.

Inquiring into the probable log input this winter, we find that the

present intention is to log but 10 or 15 per cent more hemlock and hardwoods than was logged last winter, while there will be a heavy decrease in pine, owing to the exhaustion of timber supply. Many factors, of course, will arise to influence the actual log input as compared with the estimates now, and while some firms log the year around, and are in a condition to take quick advantage of market changes, the majority still continue to log and saw in the old fashioned way, so in view of possible unsatisfactory weather conditions and shortage of labor, it is not likely that the input this winter will exceed the amount now planned for.

There is a general belief that woods wages will be considerably higher this winter than last—some firms even saying that the increase will be as much as \$5.00 per month. However, the average of all reports received indicates an increase of about 10 per cent for the common classes of labor, with little or no increase for the higher paid classes of blacksmiths, cooks and engineers. While it may cost more to feed men this winter because of the highest known prices for beef, this will be offset by cheaper hay and grain for horse feed. There may be a more abundant labor supply later in the season that will reduce wages somewhat, but with the present general industrial activity, no super-abundance of labor is likely to appear for some time to come.

COMMITTEE ACTIVITIES

Since our meeting in Houghton, July 24, the various association activities have gone steadily forward. The railroad committee, through its traffic expert, has presented a brief to the Interstate Commerce Commission in the transit rate case, and an opinion from the commission may be expected soon. It is possible that this may be of such a nature as to call for further action on our part.

Pursuant to instructions, the committee on grades and information met with the grading rules committee of the Michigan Hardwood Manufacturers' Association in Chicago on Sept. 19 and agreed upon recommendations for changes in the hardwood rules that have been submitted to all members and will be further discussed to-day by the chairman of the committee, Mr. Quinlan.

The advertising campaign for birch and hemlock began on Oct. 1 as authorized by the association, and the results to date will be reported by the chairman of the committee, Mr. McCullough.

CONDITIONS ELSEWHERE

Reports of prosperity come from every section of the lumber producing field. The advances of from \$1.00 to \$4.00 per thousand feet in the prices of the various grades of hemlock and hardwoods have been duplicated in practically every prominent wood. An exceptionally well informed lumberman computed that from Jan. 1 to Sept. 1 the advance in northern pine grades had ranged from \$.50 to \$3.00 per thousand, in yellow pine from \$1.50 to \$4.00, in coast fir from \$2.00 to \$4.50, and in Idaho timber from \$.50 to \$3.00. Since this compilation was made, still further advances have taken place. Nowhere in the lumber field is there now much, if any, surplus of stock—in fact, the shortages far overbalance the surpluses. Neither is there any indication of serious overproduction of lumber for at least a year.

GENERAL CONDITIONS

Nineteen hundred and twelve will go down in history as a presidential year, which, contrary to all precedents, brought increasingly better general business conditions with each succeeding month. The business revival which began at the first of the year has been supplemented by record breaking crops which are bringing remunerative prices to the producer, and which will carry the tide of prosperity well into 1913. Foreign trade is the largest ever known. The steel mills have on their books five months business at full capacity, and pig iron prices have at last advanced in commensuration with the earlier advances of the finished product. Railroad operations are also beginning to show a healthy gain in net profit. All this is simply part of the natural reaction from the preceding period of depression that is bound to continue for some time to come. There is an abundance of room for healthy growth and expansion in many lines, and it is to be hoped that the activity now manifest will not outgrow proper bounds and become a boom which may later be punctured. At this time, we can do no better than to repeat the admonition made a year ago—"Say nothing and saw wood—only don't saw too much."

The report of the treasurer showed a total on hand October 21, 1912, \$8,605.68. There were paid out on vouchers \$4,733.64, which, with miscellaneous expense, made a total of \$5,249.97. The net balance on hand October 21, allowing for balance in bank and vouchers not paid, was \$3,355.71.

M. J. Quinlan, reporting for the grades committee, told of his committee having met with a similar committee from the Michigan Hardwood Manufacturers' Association relative to proposed changes in grading rules on northern hardwoods. Mr. Quinlan pleaded for more general moral support from the members, asking them to express to the members of the committee their opinion regarding this important question. He asked for a roll call vote on the sentiment

of the association regarding the proposed changes. The motion calling for an endorsement of the committee's actions was passed by a unanimous vote.

President Hamar suggested the need for more grades in hemlock lumber and stated that they would probably be effected by the first of the year. The recommendations of the grading committee in this direction were explained and the proposed new grades discussed by the members. It was suggested that present rules are not adequate, which is shown in the fact that the various manufacturers are using their own grades for hemlock lumber. It was suggested that the chief inspector visit the various mills and go into the yards, making hemlock grades which would conform to the suggestions of the committee and which would therefore be uniform throughout the membership. It was subsequently moved that this suggestion be carried out.

M. P. McCullough, chairman of the advertising committee, reported on the work done by that body since the last meeting. The association, through its committee, has contracted with two farm papers circulating principally in Wisconsin and northern Illinois for hemlock advertising and has taken space in three architectural and building papers in order to cover birch in an advertising way. In addition, books of plans have been prepared and follow up on the hemlock advertising and birch books illustrating the wide adaptability of that wood have been prepared to back up the advertising of birch.

The committee has also sent reprints of the hemlock ads to some eight hundred retail dealers in the territory reached by the advertising, together with a letter explaining the campaign and offering to send them the building books. In this way a considerable interest has been stirred up among the retail yards.

The efficiency of the committee's efforts is shown in the fact that, while the ads first appeared October 1 and in no case had run more than one issue to the date of the meeting, 144 replies had already been received, 93 being on birch and 51 on hemlock.

It was later determined to allow the advertising committee to

print any number up to 5,000 of hemlock books and 1,500 birch books for the use of the members.

Chairman W. G. Collar of the railroad committee, said that since the last meeting the committee's attorney, Mr. Ewing, has filed a brief with the Interstate Commerce Commission covering the matter of transit rates on logs and lumber, but that nothing more can be done along this line until the decision of the commission is rendered. Mr. Collar requested that the members read this brief carefully, as copies have been sent to each. He stated that as soon as the commission renders an opinion it will be necessary for the committee to take up the matter with the individual railroads, in order to have tariffs which are put in to conform with the decisions of the commission worded in such way as to do the least possible damage. He further suggested that if such a conference is necessary it will be extremely important that some other representatives of the association meet with the committee. The report carried with it a request that the president be authorized to appoint other members to join with the committee in taking up the matter with the railroads at the proper time. Inasmuch as this request was embodied in the report, the acceptance of the report was equivalent to a motion to that effect.

President Hamar endeavored to start a discussion on market conditions but it seemed to be the general opinion of the members that it is pretty hard to give any opinion on a market when they didn't have any lumber to sell. Discussion of the question of woods labor brought out the fact that there have been a number of vacancies filled in the woods by woods laborers returning from the harvest fields of Minnesota and the Dakotas. The situation seemed to be somewhat easier.

The secretary's statistics on labor showed that wages this year are ten per cent higher on an average than at the same period last year.

The discussion of the labor situation was followed by a number of suggestions from the members covering various topics, after which the meeting adjourned.



Specific Heat of Wood



The United States Forest Products Laboratory, at Madison, Wis., has issued Bulletin 110, in its series of publications. "The Specific Heat of Wood" is the title, and it indicates the line of investigation. The author is Frederick Dunlap, first assistant. The publication is strictly technical, but the purpose in view is to reach results and conclusions which will be of practical value to those who handle wood in any form, but particularly those who operate dry-kilns. Experiments with sixteen species which grow in the United States, and four which are foreign, show that not quite one-third as much heat is required to raise a given body of wood to a certain temperature as to heat an equal body of water to the same temperature. The samples of wood were exposed to temperatures from 0 to 106 degrees, centigrade, and were all oven dry at the beginning of the experiments. They consisted of hard and soft woods, and those very light and very heavy.

The results are so nearly the same for all these woods as to lead to the belief that the capacity to receive heat is practically the same for all.

The fact that the specimens were oven dry appears to detract somewhat from the practical application of the information by dry-kiln operators, for wood that is oven dry has no place in a dry-kiln. It is already as thoroughly seasoned as any kiln can make it. Anticipating, perhaps that this criticism might be made by persons who are looking for immediate practical results which can be applied in a business way, the author is careful to say that the search is for exact information and precise figures, rather than for something which can be used immediately and in its present form. The real character of the wood itself—the

ultimate structure and constituents—is one of the matters under investigation, and hope is expressed that the experiments will throw light on that subject.

The real substance of wood—known as lignin—is yet a chemical puzzle. Investigators have found out a great deal about it, but some things are still being investigated. The microscope shows the physical structure, the cells, the pores, the fibres, and other elements; but the microscope is powerless to penetrate the mysteries of chemical combination. It is known that wood dried at a temperature of 300 degrees contains only about one per cent of inorganic matter; the other ninety-nine per cent is organic. This combination is lignin.

In a study of the ultimate character of wood, the chemist begins where the microscopist leaves off. The bulletin just issued from the laboratory at Madison is a beginning along that line, though it is not a chemical investigation thus far. One thing which is indicated by the investigation is that wood which has been steamed requires more heat to raise it to a given temperature than is required by unsteamed wood. This result has not been announced as a fact, but simply as an indication. "It appears possible," says the report, "that exposure to moisture at high temperature increases the specific heat of wood. If this is true, other properties, and with them technological character, may change also. This behavior needs further study."

This suggestion gives a hint which may lead to important results in lumber seasoning. If the application of steam produces a change in wood which may be measured by an increased specific heat, results may be worked out which will be of great practical value in seasoning timbers.



Satinwoods of Commerce



Under the name of satinwood a number of entirely different kinds of woods for cabinet making are distinguished in commerce, according to the deeper or lighter shades of yellow. The requirements of the trade in the United States are satisfied with satinwood chiefly from the West Indies and the Guianas, but several important kinds are found also in Mexico, Central America, and Colombia. A great uncertainty still exists as to what species the different satinwoods belong, and in order to determine this definitely it will be necessary to arrive at the true origin of these woods. The only sure way of finding out to what species they belong is by examining authentic specimens of the foliage and flowers of the different trees from which the woods are obtained.

If it were possible to procure specimens of all the so-called satinwoods, with information as to where and in what quantities they can be procured, their cost, and their physical and mechanical properties, and place them before the manufacturer, he would soon be able to select for himself the kind or kinds best suited for his particular purposes. While this is possible with a good many groups of woods, it has never happened with the satinwoods. In every case manufacturers have had to take what was offered as satinwood and make the best of the material which importers were able to procure from one source or another. There are a number of excellent woods with which manufacturers and importers are wholly unacquainted and could be used in lieu of the costly substitutes.

The true and original satinwood of commerce is produced by a tree growing in Ceylon and India. It is known botanically as *Chloroxylon swietenia*, and belongs to the same natural group of plants as the true mahogany of tropical America. While these two trees are closely related botanically the woods have very few characters in common. The East Indian satinwood tree attains a large size and is esteemed in value next to the East Indian ebony (*Diospyros quaesita*), which is the most valuable ornamental wood in Ceylon. The wood is hard, heavy (about sixty pounds per cubic foot), very close and fine-grained, very durable, of a light orange color, takes a beautiful polish and is suitable and used for all kinds of ornamental work. It is more or less liable to warp and split if not well seasoned in the shade. The flowered or feathered satinwood when first polished is one of the most beautiful woods in the world. This grade of wood is generally obtained from the roots of the tree. Satinwood gets darker and loses much of its beauty unless it is protected by a coat of fine varnish. The wood is exported to Europe chiefly from Ceylon, and to a less extent from India, and occasionally comes to the American markets either direct or is reshipped from England. It is known in the trade as East Indian satinwood, and is quoted in London at prices ranging from fifteen to thirty cents per superficial foot.

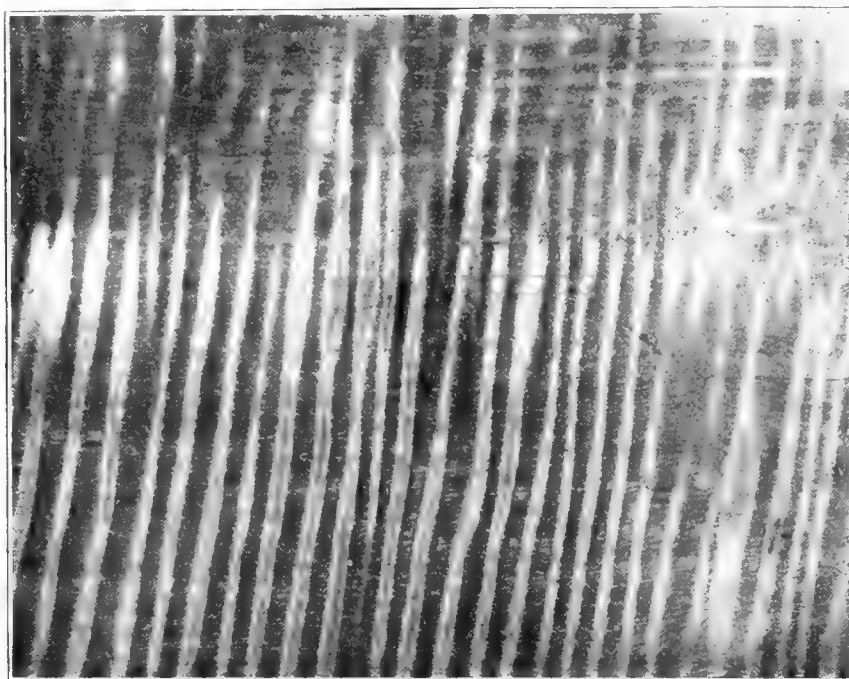
Of the West Indian species yielding satinwood, the best known kind is the wood of *Xanthorylum flava*, a tree closely related to our southern prickly ash (*Xanthorylum clava-herculis*). The latter is also a native of Cuba, Porto Rico, St. Domingo and Trinidad, and the wood is often substituted for satinwood. It is called yellow sanders in Jamaica and epineux jaune in the French West Indies. *Xanthorylum flava*, which is rarely more than thirty-five feet in height and about eighteen inches in diameter, does not develop a distinct heartwood, but the color gradually deepens from a light yellow at the bark inward to a light orange at the center. It is even and very fine-grained, of a satiny luster in a longitudinal section, and shows on its polished surface a beautiful rippled pattern (see illustration). It is slightly aromatic like the East Indian satinwood when it is first cut. Its weight is about sixty pounds per cubic foot and its crushing strength 4.31 tons per cubic inch. It is a great favorite for veneering, panels, turned articles, inlaying, cabinet work, and furniture. Its value is from \$30 to \$35 per ton in England.

Another West Indian tree yielding satinwood is the *Xanthorylum elephantiasis*. It is a somewhat larger tree than *X. flava*, and the wood is sometimes called zebra wood. The tree often attains a height of fifty feet and a diameter upward to four feet at the base. The wood is of a light yellow color, beautifully waved and mottled, and takes a very high polish. It is much esteemed for cabinet work and for interior ornamental work.

Thorny yellow wood (*Xanthoxylum brachyacanthum*) of northeastern Australia is often sold as satinwood. It is a tree from forty to fifty feet in height and

from twelve to fifteen inches in diameter. The wood is bright yellow, silky, soft, close and fine-grained, and easily worked. In some of its qualities it is said to be equal or even superior to the West-Indian satinwood. This wood is sometimes imported into England, but it rarely reaches American markets.

The West Indian satinwood (*Simaruba tulae*), known in Cuba and Porto Rico as aceitillo, the Spanish for "little oil tree," is a small tree of from forty to fifty feet high and from twelve to eighteen inches in diameter. It is found throughout the West Indies, Central America, and northern part of South America. While it grows at lower altitudes, it was formerly most abundant in the original forests at an altitude ranging from 1,800 to 2,500 feet. After many years of exploitation this wood has become very rare and little of it is now being exported. So valuable is it at the present time that in Porto Rico the stumps are being dug up and cut into veneer which is highly esteemed for making furniture. Until recently it has been cut and shipped in considerable quantities to England at \$2.00 per cubic foot. It is sold also by weight and the lower and medium grades sell for from \$15 to \$50 per ton. It was formerly used extensively in England for the interior



POLISHED SURFACE OF WEST INDIAN SATINWOOD (*XANTHORYLUM FLAVA*)

finish of parlor cars. The wood is now very valuable and regarded as one of the most ornamental of the tropical American woods. Its color varies in shade from a light to orange yellow. It is hard, heavy (about fifty-five pounds per cubic foot), very close and fine-grained, takes an excellent polish, and the most esteemed kind is that which possesses the curly or wavy grain. This latter property renders it one of the most valuable woods for fancy cabinet or furniture work. Practically all of the curly logs and stumps are cut into veneer.

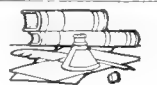
There is a closely related tree (*Simaruba officinale*) in British Guiana, Central America, and parts of the West Indies, which furnishes a wood nearly similar to the West Indian satinwood. It is called simarupa in British Guiana, and acajou blanc in Guadeloupe. The tree grows to large sizes on sandy soil and on islands in the rivers of the northern part of South America. The wood is of a light color, very fine and even-grained, and is one of the most useful woods in the Guianas for interior finish and furniture. The average height of the tree is about ninety feet and produces logs

from ten to twenty feet long and squares twenty-four inches. The wood is said to repel insects, and it is quite likely that it will be substituted a little later for the valuable wood of *Simaruba tulae*.

British Guiana supplies another satinwood botanically called *Maba guineensis*, which has a whitish or yellowish colored heart wood. This is obtained from a tree closely allied to our persimmon tree and yields a wood that has a satiny appearance and is excessively hard, heavy and very fine and close-grained. It has a very pretty pattern, which looks well when polished. In French Guiana this wood is known as satiné or satiné rouge, and in the Bahamas it is called yellow wood. This satinwood must not be confused with *Parinarium guianensis* which is a dark red or brown wood and is incorrectly called satinwood by the French. *Maba guineensis* grows abundantly and to a large size on a number of the islands of the West Indies. Formerly square logs and planks from nine to twenty inches wide were shipped to England and less extensively to the United States. This wood is sometimes confounded with the East India wood to which it bears a close resemblance.



Annual Crosstie Purchases



The Department of Commerce and Labor, in co-operation with the Forest Service, has published the report for 1911 showing the number of steam and electric railway crossties purchased in the United States. Similar reports have been published annually for some years. They show considerable fluctuations from year to year in the number of ties. Business conditions in the country govern the tie output. The demand from new roads varies, but the purchases for repairs of old lines are fairly constant.

There is a tendency to change in kinds of woods used, as is shown in detail in the statistics below. This change is largely due to the use of preservative treatment by which woods that are not naturally long-lasting are rendered immune to decay for a term of years.

An average railroad tie contains about thirty-two feet of lumber, and the total tie output of the country is equivalent to 4,320,000,000 feet board measure, or about one-tenth as much as the yearly output of sawmills. The sawed ties are counted with sawmill output, but the hewed ties are not so counted.

Following is a summary of the report just issued by the Department of Commerce and Labor:

While the total purchases of crossties by steam and electric railroads of the United States during the calendar year 1911, namely, 135,053,000, was less than that for 1910 by 13,178,000, or 8.9 per cent, it was larger than that for any other year since 1907, exceeding the total for 1909 by 11,302,000, or 9.1 per cent, and that of 1908 by 22,587,000, or 20.1 per cent. The steam railroads reported 126,155,000, or 93.4 per cent, of the crossties purchased during 1911, while 8,898,000 or 6.6 per cent of the total were reported by the electric railroads, as compared with 139,596,000 or 94.2 per cent reported by the steam railroads, and 8,635,000 or 5.8 per cent by the electric railroads for the preceding year. It will be noted, therefore, that the entire decrease from the figures of 1910 was in the number of crossties purchased by the steam railroads, while an actual increase of 263,000, or 3.0 per cent, is shown in the reported total purchased by electric railroads. In this connection the large decrease in the total number of crossties purchased for new track during 1911, as compared with the totals for the preceding years, with the exception of 1908, is also significant. The total purchased for this purpose in 1911 was 11,041,000, as against 22,255,000 in 1910, 16,437,000 in 1909, 7,431,000 in 1908, and 23,557,000 in 1907.

While oak, as in preceding years, supplied more material for crossties in 1911 than any other species, it is noteworthy that the decrease in the number reported from this wood in 1910 was 13.0 per cent, as compared with a decrease of 8.9 per cent in the total number of crossties cut from all species. Although there was an actual decrease in the number of southern pine crossties reported for 1911 as compared with 1910 of about 2,000,000, the percentage of decrease was smaller

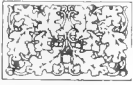
than that for the total from all woods, being 7.6 per cent. A similar showing is noted for Douglas fir crossties, while an actual increase in 1911 over 1910 in cedar crossties of 710,000, or 9.7 per cent, is shown. There was little change in the number of chestnut crossties reported for the two years. While these five woods have contributed the bulk of crosstie material for many years, a significant and interesting fact is disclosed by the figures covering the purchases of crossties cut from gum, maple and beech. Prior to 1908 the number of crossties manufactured from these three woods was negligible, though in 1911 they supplied material for 3,591,000 crossties, or nearly 3 per cent of the total from all woods. Rapid increase in the use of these and other relatively low-priced woods during the last two or three years is due mainly to the fact that with an effective preservative treatment, crossties cut from this class of timber will last as long or even longer than untreated crossties made from the more expensive and so-called standard crosstie timbers, such as oak and southern pine. A substantial growth in this practice of treating crossties is indicated by the increasing total number of crossties reported as having been given some preservative treatment during the past few years. In 1907 this total was 19,856,000; in 1908, 23,776,000; in 1909, 22,033,000; in 1910, 30,544,000, and in 1911, 31,141,000.

The following statement shows, by species of wood, the number of crossties purchased in each year from 1907 to 1911, inclusive:

Kind of wood	1911	1910	1909	1908	1907
Oak	59,508,000	68,382,000	57,132,000	48,110,000	61,757,000
Southern pine	24,265,000	26,264,000	21,385,000	21,530,000	34,215,000
Douglas fir	11,253,000	11,629,000	9,067,000	7,988,000	14,525,000
Cedar	8,015,000	7,305,000	6,777,000	8,172,000	8,954,000
Chestnut	7,542,000	7,760,000	6,629,000	8,074,000	7,851,000
Cypress	5,857,000	5,396,000	4,589,000	3,457,000	6,780,000
Tamarack	4,138,000	5,163,000	3,311,000	4,025,000	4,562,000
Hemlock	3,686,000	3,468,000	2,642,000	3,120,000	2,367,000
Western pine	2,696,000	4,612,000	6,797,000	3,093,000	5,019,000
Redwood	1,820,000	2,165,000	2,088,000	871,000	2,032,000
Gum	1,253,000	1,161,000	378,000	262,000	15,000
Maple	1,159,000	773,000	158,000	171,000	.....
Beech	1,109,000	798,000	195,000	192,000	52,000
All other	2,682,000	2,895,000	2,603,000	3,421,000	5,574,000
All kinds	135,053,000	148,231,000	123,751,000	112,466,000	153,703,000

American Business Methods Appreciated

The characteristic promptness with which American lumbermen fill orders is appreciated in Australia, and dealers in that country buy here rather than wait for the slow delivery from their own forests. "One of the great drawbacks to the use of Australian timber," says the Melbourne Age, "is that it is impossible to get it properly seasoned. Leading manufacturers buy their wood in the log, cut it up, and season it themselves, keeping it for years before they use it. It is easier to obtain timber from North America than from Queensland. An order can be given for American timber and it is supplied at once, but if an order is given for Queensland timber it is months before it is received."



Opportunity and Success



Some business men are prone to believe that only those with large capital can succeed today. It is not uncommon to hear it said that only the man who can go down South and put up a couple of hundred thousand dollars for timber can make much money out of the sawmill business, and that to be a wholesaler and succeed to a marked extent requires considerable more capital than the average man possesses.

It is undoubtedly true that large aggregations of capital, properly directed, will result in handsome earnings being made. But proper direction is not always available, and getting good executives often is a harder task than summoning the necessary financial resources. In the last analysis, "Big Business," spelled by the magazine writers with capital letters, is not capable of striking terror to the little fellow, unless he is small in intellect and courage as well as in rating.

Everybody in the hardwood business can call to mind at least one striking example of a man who has made a conspicuous success without having a particularly large investment of money and without having done an enormous volume of business. He has demonstrated, if a demonstration were required, that careful study of manufacturing methods, skill in organization, and study of sales and consuming conditions will bring success, no matter whether the business affected be a tiny one tucked back somewhere out of sight or an enormous enterprise involving millions and standing out in the most prominent position under the sun.

Elbert Hubbard's saying about the world making a track to the home of the master mouse-trap maker is hardly correct, for he would have to have a sales and advertising department to make good, and would have to run copy in "The Mouse-Trap Dealers Magazine" to get the necessary attention focused on his product; yet there is a large portion of truth in the suggestion contained in the aphorism that quality is back of success, and that those who have learned where to find quality usually go back for more.

The lumberman referred to has a sawmill located in a section of the country famous for the quality of its white oak. But most of the oak has been cut out, and most of the mills that once flourished have moved away. The hardwood manufacturing industry, as a whole, has moved a number of degrees of latitude south, and is a great many miles nearer the equator than when the center of the trade was near the mill to which attention has been called. But that mill has not moved, and there is no indication that it will do so in the near future. Ask its owner about the timber question and he will smile and say, "Oh, I always manage to get enough logs to keep going."

The truth of the business is that everybody in that part of the country knows the sawmill man, likes him, and calls him by his first name. Because he puts on a linen collar and a "biled" shirt, drives an automobile, and rides up to the city occasionally, does not mean that he has shut the farmers and others who own timber out of his circle of friends, or permitted them to shut him out. He can strike hands and talk crops with any of them, and has a sincere and cordial interest in all their doings. Thus, when a log-buyer from another place comes around and inquires about timber, the answer usually is, "Oh, I just guess I'll save those logs for Charley."

And the farmer knows, too, that he is going to get a fair price for them, and that there will be no jockeying around for the purpose of taking advantage of the other man or the seller. The price will be just what they are worth, and it will be paid, cash in hand, as soon as they are delivered. The people who have been selling logs to this mill have always done business with its owner, in person, and have always been well treated, and they expect to continue to deal with him as long as they have any trees to sell.

As the sawmill operator admits that the big problem is to get good logs, plenty of them and at the right price, the hold which this manufacturer has established on the people who supply him guarantees the success of that department of the business, at any rate.

Inside the mill there is a feeling of unswerving loyalty to the head of the house that comes from a knowledge that everybody in the business, from the sawyer to the youngest off-bearer at the veneer saw, is going to get all that is coming to him, and that labor is going to be

rewarded. The same superintendent, the same yard foreman and the same sawyers are working in that mill that were serving it a dozen years ago. Death is about the only severer of those business ties. Those who have remained have earned more money as time has passed, and have gotten it in their pay envelopes. It has not been necessary, fortunately, to adopt a piece-work system to insure every man doing his duty; for the "personal equation" is so well taken care of, and esprit de corps is so actual a force in the plant, that a mechanical method of computing the results of the efforts of each employe is unnecessary.

The art of building up an organization and then holding it together at top speed and maximum efficiency has not been mastered by many men. The mill which has been described is alone in its community, and perhaps has an easier problem than the plant which has several competitors bidding for the services of its best men; but even under conditions of sharp competition it is not likely that many of these veterans, who have been trained in the school of loyalty under an employer who has made it a pleasure to work for him, would leave.

The owner of the plant has a lot of ideas on the subject of cutting lumber so as to make it the best lumber possible, and these have been transmitted to everybody on the place. His mill has not a great capacity, so that he has seen the necessity of holding the quality up to the highest possible point. Thus the lumber that goes on his yard is manufactured just right, and is a proper offering for a discriminating customer.

This manufacturer is said to have been one of the first in the country to sort his lumber according to widths; in other words, to regard dimensions as something more than arbitrary divisions, but as conveniences for customers. He figured that if there were a furniture factory which wanted to buy only ten-inch lumber, he ought to be in a position to sell it a carload of just that variety; or if a chair man wanted to get strips of one size only, instead of running the entire range of widths provided in the usual classification, it would be worth while to have them ready to sell, and not have to dig them out of a pile.

Consequently his lumber is divided into more divisions as to width than that of nearly anybody else in the business; this, too, be it noted, in spite of his relatively small production. This means considerable difficulties about accumulating sufficient stock of each kind, but, by watching his customers' needs—upon which the entire scheme of piling is founded—he is able to adjust his operations and have something ready to offer to his trade all the time.

In his mill is a veneer saw which he uses for manufacturing quartered oak veneers out of choice logs which he secures. And here again, by a combination of care in purchasing, excellence of manufacture and attention to details of handling, he has an output that is really sought by consumers of veneer. He is able to go, in turn, to those who are seeking supremacy in the manufacture of panels and get a price for his stuff that is away above the market, because the panel man realizes that, with that kind of stock for his faces, he need not worry about competition when he goes to sell to the high-grade furniture builder.

This "scientific manager," who is scientific simply because he applies ideas which are familiar to everybody and are recognized as sound, and who deserves the title of manager because he has his finger on every department of his business, really studies his customers and their needs. He visits factories where his lumber is used; sees exactly what happens to it, and follows it from the car to the finishing-room. He knows what the requirements of his trade are, and when he goes back to his mill he is in a position to furnish exactly what his customers can use to the best advantage. Isn't this a contrast with lumbermen who don't even know what their product is used for, and couldn't tell whether the consumer is buying a better or a worse grade than he ought to have?

"But how are you going to study your consumer's need if he won't let you into his factory?" is the retort that may be provided.

Right here is another interesting feature. This manufacturer and let it be said here, lest the reader insist that he is a mythical character, that he is a flesh-and-blood lumberman—has succeeded in getting the information he wants, not by a sleight of hand, nor the use of hypnotism, but by proving that he is “on the level,” and has nothing to conceal. He has convinced his customers that he is trying to serve them, not to take advantage of them; and that he will give them the benefit of whatever advice he is capable of formulating. It is just a simple case of winning confidence by doing the things that are calculated to produce confidence. Result, he has the confidence of his

trade, and with it all necessary information about their peculiarities and requirements.

A fellow lumberman was recently commenting in admiring terms upon the really wonderful success of the subject of this sketch, and was comparing his situation with that of his own firm.

“We do ten times as much business as that lad,” he said, “and yet I am certain that we don’t make more than twice as much. And it’s easy to figure that on the capital invested our dividends are away below his. I wonder how he does it!”

I wonder!

G. D. C. Jr.



The Filer Not Always the Goat



A thing of beauty is a joy forever, according to the views of one Mr. Keats, and while a good filer makes no claims to beauty, he certainly gets in line on the latter half of the poetical declaration. The sawmill man who is blessed with a good sawyer and a good filer develops the sort of disposition which enables him, as the Western philosopher put it, “to look every damned man in the face and tell him to go to hell.”

The filer is responsible to a great extent for the character and quantity of the output of a mill, and he usually realizes it. He isn’t permitted to forget the fact that it is up to him to have the saws in tip-top condition, and any defect in the lumber turned out is pretty sure to be charged up to poor work in his department. As a matter of fact, sawmill men are perhaps too ready to blame their troubles upon the filer instead of looking around for some other possible cause.

A mill in one of the big Ohio valley producing centers was having trouble with its lumber. The thickness of the stock turned out by its band mill was uneven, and some of it had gone through in rush orders to customers, and had resulted in kicks of sufficient consequence to stir things up from the front office to the filing room. Of course it was the proprietor of the latter department who came in for most of the blame. He took it all without saying much and worked a little harder on his saws, though he insisted that he had done his best to make them do their work properly. With all the increased care and watchfulness at that end, however, miscut lumber continued to be turned out, and the sawyer and the mill superintendent began exuding remarks which caused the atmosphere in the neighborhood of the plant to take on the pale blue coloring supposed to be characteristic of sulphuric fumes.

Then, of course, a hunt began for the hidden cause of the trouble. And it wasn’t so very hidden at that. Testing the tracks showed that they were out of alignment and that the defects in the lumber were due to this situation. You couldn’t expect a saw to cut evenly if the log weren’t brought against it exactly at right angle, and as the tracks carried the log off at a slight angle the effect was bound to be what had been attained—miscuts.

Tearing up the track and putting it down again with absolute accuracy relieved that part of the problem, and of course the occasional development of trouble later on immediately suggested this part of the proposition and didn’t permit the difficulty to continue as long as it had done in the first place. And of course the filer had a chance to prove his innocence when charges of poor work were brought against him.

The carriage itself is likely to get out of kilter and cause the same sort of trouble. The rough handling to which it is submitted makes it almost certain that at some time or other it will need fixing up, and when defects are found in the product of the mill it is just as well to take a look at the carriage before blaming it altogether on the saw.

A superintendent who is known as one who doesn’t overlook many bets said not long ago that just as a matter of preventing difficulties of this kind he subjects his tracks and carriage to inspection at brief intervals, and frequently finds that the alignment of the former or the latter has been disturbed and that by the expenditure of a few minutes’ time and labor at the noon hour or just after closing time, things can be straightened out and accuracy of manufacture assured.

“Anybody can take a look at the operations of a sawmill,” he said, “and figure with certainty that with the constant pounding and hammering on the carriage and tracks something is going to give sooner or later, and probably sooner. You can’t expect the timbers which support the track to hold forever without giving a fraction of an inch, and the only sensible thing to do is to take time by the forelock and examine your tracks and carriage just as regularly as you do your saw. Then you will know if trouble comes where to put the blame, and won’t have to saddle the burden on a filer who perhaps is keeping your saws in good shape.”

In spite of the fact that it is well recognized that trouble is likely to result from this source, one of the biggest lumber concerns in the country produced a lot of poor lumber, of a very expensive variety, before it was discovered that the tracks of its mill were not properly lined up. The company furnishing the saws had been called on the carpet for turning out equipment which produced no better results than that, and made a rigid inspection of the saws in order to determine if they were defective in any way. Finally one of the men in the mill suggested to the superintendent, who is not regarded as possessing a particularly keen intellect, that possibly the tracks weren’t exactly true. Examination proved that the millman was right; and matters were straightened out in a short time, the filer, the saw man and all others being exonerated, and happiness prevailing generally.

So while the operation of the sawmill to the best advantage depends to a large extent on the saws being kept in proper condition, they can’t do all the work; the complementary equipment must be equally accurate if properly manufactured lumber is to be the result.

G. D. C., JR.

Lumbermen and Forestry

The question of the application of the scientific principles of forestry, and notably the tree planting feature of the profession, has never been given very serious consideration by practical lumbermen. Forestry, as a possible money maker, has not been favorably thought of until within the last few years. There comes to light occasionally, however, instances of practical, hard-headed lumbermen making experiments along various lines with a view to trying out the teachings of the modern forestry school. These experiments are usually in the tree planting line, and within the last month two such instances have come up, one in Michigan and the other in Mississippi.

An incident was recently brought to notice by the suggestion of a large northern concern owning property in Mississippi that it is contemplating planting a considerable area of cutover land in that state to catalpa, the idea being to raise this tree for tie and pole purposes, and to intermix with it some suitable hardwood which will eventually attain large enough size to make saw logs. Whether or not the latter plan can be carried out practicably remains to be seen, but the fact is nevertheless apparent that this concern is giving the question of reforestation serious thought. These instances should mean a great deal in the direction of establishing a mutual basis of interest between the theoretical forester and the practical lumberman.



Meeting Michigan Manufacturers



The fall meeting of Michigan Hardwood Manufacturers' Association was held in the Pontchartrain hotel, Detroit, on October 24 with a large proportion of the members in attendance.

President Richardson presided. In a short and humorous speech he thanked the association for electing him president in his absence. He said he thought he was going to like the job.

The report of Secretary and Treasurer J. C. Knox, follows:

Secretary's Report

The report of the various committees which will be made to you today are so flattering and optimistic that it is hardly necessary for the secretary to endeavor to make an extensive report, and we will confine ourselves to the work of our office almost exclusively.

Our treasurer's report shows a balance on hand Oct. 15, of \$1,533.25, and we have to report on account of the forest fire fund a net balance on hand of \$4,099.80, Oct. 21.

Every member of the forest fire protection department has responded to the second assessment with one exception, and we are trusting to get that one. This will give us a fine start for that work next year.

Our Pacific coast rate case has now progressed to an order issued by the commission directing the railroads to check our claims and to appear before that body in January, 1913, to say why they should not make a refund on the basis of the eighty cent rate.

There are a number of important suggestions to be discussed today, among them present market conditions and the outlook for 1912-13; thicknesses for cutting hemlock; proposed changes in the grading rules on hardwood; employers' mutual liability insurance report; report of committee on advertising, and the market conditions committee report. The figures in the last report will be a surprise to many of our members in that they make the best showing since 1907.

It is customary at the fall meeting to provide for funds to carry us through the coming year and this should be cared for today.

Henry Ballou, chairman of the railroad committee, suggested that manufacturers could improve the car shortage condition by keeping cars moving promptly. Reports to his committee indicated that railroads were doing everything possible to keep traffic moving promptly by making large purchases of cars and motive power. He reported that they are also taking every precaution against starting fires from their locomotives.

D. H. Day of the grading rules committee reported that the members had unanimously agreed to submit to the consideration of the National Hardwood Lumber Association at its next annual meeting some important changes and additions to its rules.

Chief Fire Warden Charles F. Hickok made an elaborate report on the successful work during the past year looking toward the prevention of forest fires.

J. A. Kennedy of Lansing, commissioner of the industrial accident board, made an interesting and comprehensive address on the subject of industrial accidents and the Michigan state law on the subject. He recommended co-operation with the state to work out the big problems involved.

J. N. Harris of Boyne City addressed the meeting on the value of an industrial insurance plan. On motion a committee was appointed to take up the entire matter with state officials and also to analyze insurance plans and methods for self protection. The chair appointed as such committee S. L. Richardson, C. A. Bigelow, G. von Platten, A. W. Newark and F. L. Nicholson.

Chairman Odell of the market conditions committee then read the report of that committee as follows:

Report of Market Conditions Committee

The stock report compiled by your secretary from reports furnished him by the members of his association shows a very marked decrease during the year Oct. 1, 1911, to Oct. 1, 1912, in both the total stock of hardwood lumber at the mills and the amount unsold; a decrease amounting to a shortage in some items that may work some hardship to consuming manufacturers and ultimate consumers; a shortage for which the lumber manufacturer is in no way to blame; a shortage that has been brought about by the policy of the railroads and consuming manufacturers during the past few years to purchase nothing until actually required for consumption, and to make the producers of not only lumber but of all raw materials carry the burden of stock, with the result that when an unusual amount of raw material is required, there is no reserve beyond that carried by the producer.

You will note from the stock report that the amount of stock at the mills and the amount of stock unsold is less than at any time since

1907, the stock at the mills being 183,000,000 feet—55,000,000 feet less than 1911, and 21,000,000 feet less than either in 1910 or 1909, while the amount of unsold stock for 1912 is 41,000,000 feet, as against 71,000,000 feet for 1911, 71,000,000 feet for 1910, and 74,000,000 feet for 1909.

Ash and basswood show total stocks of approximately what they were a year ago, while beech, birch, elm and maple divide up the 55,000,000 feet decrease shown. Beech has fully verified the prediction of your committee, there being 26,000,000 feet in stock now as against 35,000,000 feet a year ago and 44,000,000 feet two years ago, or approximating sixty per cent of the stock in 1910. Maple shows the greatest decrease in stock during the past year, the total stock being 114,000,000 feet Oct. 1, 1912, as against 151,000,000 feet Oct. 1, 1911, and the total stock of maple shows less than for either 1910 or 1909. With a decrease of 40,000,000 feet in stock and an unusually large amount of maple going into consumption, maple should be one of the strong items during the coming year. Maple shows up in better form than anyone had reason to expect. Judging from the amount of maple lumber on hand Oct. 1, 1911, and the condition of the maple flooring market at that time, it would have been reasonable to have expected it to require at least two or three years for the stock of maple lumber to work back to normal, but this and more has been accomplished in a year. The stocks of both lumber and flooring are below normal and the demand for flooring was never better. The stock of maple flooring is about 5,500,000 feet less than a year ago and the manufacturers of maple flooring have orders booked for more flooring than they have in stock. This, with the fact that they are shipping each month more than their production and that for some time new business booked each month has been in excess of production, promises a bright future for maple flooring, which ultimately will be shared by the lumber manufacturers.

The item of number three common hardwoods is the one showing greatest shortage and it is the one item that, because of the unusual shortage, may be sold at more than its real intrinsic value. The total stocks show 32,000,000 feet, as against 57,000,000 feet, 71,000,000 feet, 76,000,000 feet and 54,000,000 feet for the respective preceding years, while the amount unsold is less than one-fourth of what it was during the three or four preceding years. This item of low-grade hardwoods should receive just as careful consideration now as it ever did, as, like the poor, it is always with us and always will be just so long as we manufacture lumber. We should remember the years of 1907 and 1908, the prices at which this item sold then, and what happened to it. The same condition will prevail again if the producer and the consumer permit the price to go so high as to encourage the use of substitutes. It is natural for the manufacturer to reason that because he has been compelled to sell his low-grade lumber during the past four years from two to five dollars per thousand less than the actual manufacturing cost, he should endeavor to recoup these losses when the opportunity offers, but results have shown that the extremely high prices of 1907 may have been the direct cause of the extremely low prices of the past four years.

While higher prices are warranted for practically all of the northern hardwoods and higher prices must of necessity prevail during the present period of short supply, your committee would recommend that you endeavor to hold prices down to a reasonable level and thus avoid a slump that is sure to follow extremely high prices.

Just so long as supply meets demand and demand meets supply within a reasonable limit, prices will go on at a reasonable level.

A careful study of our report during the past six years will show that had the demand for northern hardwood lumber been as regular as the production, there would not have been the extreme shortage and large over-production with a consequent great fluctuation in prices that we have seen during this period. Because of the nature of his business and because he has built up an organization based on a certain production of lumber each year, it does not seem possible to the manufacturer of lumber to shut down his mill and cease operations because of a production of some items in excess of the temporary demand. While possibly not so difficult, it would be just as unwise for the manufacturer to try to increase his output to meet the temporary demand or to deceive himself into thinking that it will be possible for him to do so. If properly distributed during the past six years, the supply would have met the demand reasonably well and any attempt to increase the output to meet an unusual and temporary demand only increased the over-production later on.

We have been censured for the waste of our natural resources in our manufacturing methods, but most of this censure has come from people who are not familiar either with the methods of lumbering or the value of forest products. They have not taken into consideration that the lumberman has practiced forest conservation in so far as his means, his knowledge and profitable returns permit him to do so, and that at least a part of the lumber manufacturers have fought diligently for improved methods and a profitable market for what is now considered waste product.

The comparatively recent demonstration that maple, beech and birch, when properly treated by one of several preservative treatments,

makes a superior railroad crosstie, created a new demand for that class of timber that if sawed to lumber would produce a large proportion of low grade. Many tests of treated ties made of maple, beech and birch have proven the superiority of these ties, and several of our largest railroad systems have adopted them. Both the New York Central lines and the Pennsylvania system, because of the proximity of some of their branch lines to the supply of maple, beech and birch, are using these woods extensively for ties. The New York Central lines have ties treated at Toledo, Ohio., at Shirley, Ind., Rome, N. Y., and at Bradford Junction, near Pittsburgh. The Pennsylvania lines have ties treated at Philadelphia, Mount Union, Pa., Orrville, Ohio, and have contracted for the treatment of ties at some points on the G. R. & I., probably at Cadillac. Of these plants, the following treat birch, beech and maple: Toledo, Bradford Junction, Mount Union, Orrville and Cadillac.

While the test of treated beech ties commenced several years ago, the test of time is the real test, and it is only within a few years that the use of northern hardwood ties has been adopted to any considerable extent.

The records indicate that there was a great increase in the employment of beech, birch and maple ties from 1907 to 1911, and that the amount of ties that were chemically treated during the same period nearly doubled. The total consumption of treated beech and maple ties now constitute 7.38 per cent of all that are used by railroads.

Beech ties treated with creosote, which have been on the roadbeds in France, show a large proportion of sound ties after twenty-eight years. Beech ties treated with zinc chloride, one of the cheapest processes, which have been in the roadbeds of the United States, show a large proportion of sound ties after fourteen years.

Of the woods available and formerly used in this part of the United States for untreated ties, the species showing the greatest resistance to decay have been cedar, chestnut and white oak; but neither cedar nor chestnut has been considered long-lived ties for, because of their poor resistance to abrasion, they were not adapted to the heavy traffic of the main lines. Their use on the better roads has been confined to sidings and branch lines, where the traffic was not heavy. White oak will stand the heavy traffic, but it is an expensive tie. The supply is limited and when not treated the average life is estimated at only from eight to nine years. These ties cost the railroad in the rough eighty to eighty-five cents each. It has been proven by various tests and is conceded by the best informed authorities that beech and maple ties properly treated will last just as long as the treated white oak ties, and that they are the equal of white oak in every respect, even its superior in some respects, as the beech and maple ties hold the spikes better than white oak. Being the equal of white oak in every respect and costing much less, it is not surprising that the use of maple and beech ties has increased so rapidly in a few years. We shall see them specified in many more roads in a few years if we can demonstrate our ability to supply them.

The matter of economy and source of supply will compel the use of the maple and beech ties in many of the northern states. Untreated white oak ties cost the northern railroads, delivered on their lines, eighty to eighty-five cents, with an average life of eight to nine years; if treated with creosote, \$1.05 to \$1.10, with an average life of fifteen to twenty years. The beech and maple ties, with zinc chloride treatment, cost approximately seventeen cents each and have an average life of twelve to fifteen years, or about fifty percent longer than the untreated white oak ties; beech and maple ties treated with the creosote process at a cost per treatment of approximately thirty cents each, have an average life of thirty years, the same as the white oak tie. By deducting the cost of treating an oak tie, thirty cents, from \$1.05 to \$1.10, the cost of a treated white oak tie, and comparing the result, seventy-five to eighty-five cents, with what the railroads have been paying for treated beech and maple ties, you will readily understand why they will be in favor of the latter. Or compare the untreated white oak tie, at a cost of eighty to eighty-five cents and an average life of eight to nine years, with what the railroads are paying for the beech and maple ties, plus the zinc chloride treatment of seventeen cents and an average life of fifty per cent in favor of the beech and maple ties, and see where you land.

You will find the beech and maple tie most desirable, not only from the standpoint of reasonably satisfactory returns from the ties as compared to what might be realized for the stock if cut into lumber, but also from the standpoint of the influence the tie business has on the supply of and the price for both beech and maple lumber. As you will note from the statement of the number of beech and maple ties treated, it is only within the last two or three years that these woods have been used to any considerable extent and you will note also how rapidly their use has increased. In the opinion of your committee, the demand for beech, birch and maple ties will increase much faster than it is possible to increase the supply.

Taking northern hardwoods right through the list, there does not appear a weak spot anywhere. This condition is reflected not only by our own stock list, but by the stock list of the Wisconsin association, and in fact by reports from all other sources. In consequence of this, prices all along the line must necessarily advance. Even if we

were inclined to be benefactors by trying to hold prices down, it would be just as impossible for us to do so as it has been for us to prevent the extremely low prices for northern hardwood lumber during the past three or four years. The supply is short and the demand of the consuming manufacturers will force prices up regardless of what the producer thinks best to do or their efforts to control the situation.

We have gone into this price and stock condition more in detail at this time than usual for the reason that this is one of the best opportunities we have to exemplify the oft-repeated statement made by your committee that prices are controlled absolutely and completely by the laws of supply and demand, and that the only way prices may be controlled is by the control of the supply. Because of the thousands of sawmills throughout the United States, it will be just as impossible to control the lumber supply as it would for the farmers to control the supply of potatoes.

It is the opinion of your committee that, judging from the various stock reports, the prices that have been obtained for lumber recently and from general business conditions, present values are reasonably well indicated in the appended list. We do not pretend to forecast the future, but we do believe that we shall see higher prices on most items before we see lower prices on any of them.

The recommendations made by this committee on changes in values were comparatively slight but a few conservative advances in price were suggested. In a few instances the suggestions amounted to a two or three dollar increase a thousand on high-grade stock and a considerable number of items were reported as worth one dollar more.

On motion, the report was accepted and placed on file.

Bruce Odell, on behalf of the advertising committee, commended the work of the Northern Hemlock and Hardwood Manufacturers' Association in advertising birch and hemlock, but suggested that Michigan operators make chiefly maple and beech and recommended an advertising appropriation of not to exceed one cent a thousand to exploit these woods, especially in relation to their utilization as flooring materials.

President E. A. Hamar of the Northern Hardwood and Hemlock Manufacturers' Association addressed the meeting on the methods employed by his association in advertising birch and hemlock.

Secretary R. S. Kellogg of the same association, in an address elaborated on the same subject, reciting the specific methods pursued by it. He suggested financial co-operation of the Michigan manufacturers on the hemlock campaign.

Considerable discussion followed and the report of the advertising committee was adopted with the understanding that the initial fund raised should be turned over to the Maple Flooring Manufacturers' Association for expenditure.

On motion of Henry Ballou, an assessment on the hardwood output of members of the association of two cents per thousand was authorized to carry on the regular association work for the coming year.

On motion of C. A. Bigelow, Bruce Odell was authorized to consult with the Maple Flooring Manufacturers' Association to determine the amount of funds for the joint maple advertising campaign.

It was announced that by agreement effective November 1 next, the leading Michigan hemlock manufacturers had agreed to establish sizes in both sawing and finishing their product.

The meeting then adjourned.

American Saws in Germany

The popular belief that the German-made tools are cheaper in that country than similar tools imported from America is not well founded in the case of handsaws. An article recently published in a hardware dealers' magazine at Bunzlau, Silesia, shows that American handsaws are much cheaper than the home-made article. An American 20-inch saw costs thirty-three cents, the German fifty-nine cents; American 22-inch, thirty-five cents, German sixty-three cents. It is stated that the American saw is preferred, even when both sell at the same price. Much of the superiority is due to the workmanship, for the German saw manufacturers admit that some of the American tools which are capturing the markets in that country are made of German steel imported into the United States, here manufactured, and the finished product is exported to Germany.



Crosstie Evolution



One of the most interesting things about modern life, with its rapid development of new and revolutionary ideas, is the way in which standing predictions, which have reached the point where they are accepted, largely by force of repetition, as absolute truth, are smashed into smithereens. Some proposition which has been quoted and requested and used as the basis of many a learned discussion, is suddenly knocked clear out of the situation by the interposition of a new and altogether unexpected factor.

A fine example of this is the cross tie business. The field for the use of ties is immense, since the present mileage of the railways of the country, taking renewals only into account, requires the use of 125,000,000 ties a year. Owing to the rise in the price of white oak timber and the consequent increase in the cost of ties made of this material, the introduction of the concrete ties was followed by the announcement, from the interests concerned with the production of steel and cement, that soon nothing else would be used by the transportation companies. And that would possibly have been the case, if the wood-preserver hadn't come along and knocked those predictions into a cocked hat.

At present, with the development in the use of the treated tie the most phenomenal feature of the forest products situation (perhaps excepting the development of wooden block paving, which is in the same class) the chances favor the relegation of the concrete tie to the rear, for there is every argument against it. Those who dislike to face a heavy first cost refuse to use it, and, on the contrary, those who are looking for a low annual cost find in the creosoted tie a better proposition than one made of reinforced concrete.

The latter has not proved satisfactory in actual service, either, a recent wreck which occurred at a point where the rails were affixed to concrete ties developing the fact that, owing to the inability of the tie to absorb expansion and contraction, the bolts holding the rail to the tie had been sheared. Thus the big feature in favor of the use of wood ties—their resiliency and elasticity—is again emphasized. There are other features which make the concrete proposition less desirable, and consequently it is not likely to make much further headway.

Looking at it purely from the standpoint of dollars-and-cents, the comparison figures out favorably to the wooden tie. A steel and concrete tie, laid in place, costs about \$2.50. It will last, at a liberal estimate, not more than thirty years. This is an annual cost of eight and a third cents. A treated red oak tie costs, on an average, forty-five cents at the mill; thirty cents for the creosoted treatment; twenty-five cents for freight and twenty-five more for labor. This is the top price for labor and the other items, as ties can be put in place under favorable conditions for twelve and a half cents. The total cost, laid down, is \$1.25. It is estimated that red oak ties which have been creosoted will last for twenty years, and on this basis the annual cost is six cents a year, a reduction of about twenty-five per cent compared with concrete ties.

An interesting point about the use of preservatives on ties is that it has ruled out, for this kind of service, the material which was formerly used almost exclusively for tie purposes—white oak. The "pits" of its surface are closed and it is impervious to the action of the preservative, the very quality which makes it excellent as an untreated tie rendering it unsuitable for treatment by the preservers. Locust and heart pine (long-leaf), which are used untreated, cannot be satisfactorily creosoted, but hickory, which has come into some use since the preserving methods began to be generally favored, is susceptible to treatment with creosote.

Carrying the comparison of cost forward, and figuring the average price of white oak ties at seventy cents, the cost of the treated red oak tie, seventy-five cents, is a little greater and therefore the use of treated material involves a greater initial outlay than is necessitated by the purchase of white oak. For that reason many roads are still using white oak, though the average life of an untreated white oak tie is only eight or nine years (twelve years under favorable condi-

tions, and only six or seven in the South), and the treated wood is relied on to last for twenty.

The figures given in the latter connection, it must be admitted, are only estimates, because the first creosoted ties laid down in this country in quantity were put into service only nine years ago. Since these have shown no sign of decay since then, and since European experience has been exceedingly favorable, it is believed that the estimate is well within bounds.

Though the railroads have not all been converted to the use of treated ties, the enormous growth in the business shows that the carriers are coming over rather rapidly. It was stated that 125,000,000 ties are used annually in replacement work. In 1908 not more than eight per cent of these were treated ties. This year, it is stated by authorities, fully twenty per cent of the number will be of that character. There are seventy-five plants for creosoting purposes, and the number is growing rapidly. One company, established in 1904, is now building its fourteenth plant, thirteen of them having been put up since 1907, so that the big gains have all been within the past five years.

Those who are interested in the development of wood-preserving from an economic standpoint believe that it is working a remarkable change for the better. Heretofore ties have had to be cut out of white oak trees, and while many of them were produced from timber that could not have been made into high-grade lumber or used for other purposes, yet an enormous quantity of ties was converted from trees that could have been sawed into boards and made into all sorts of valuable and beautiful articles. And the tie manufacturers frequently forced into service small oak trees which, if they had been allowed to grow for fifteen years more, would have been easily convertible into much greater values in other forms.

Thus the entrance of wood-preserving methods has enabled many inferior woods, which under former conditions could never have been used for tie purposes, to be utilized for this work and has made it possible for white oak to be reserved for other purposes for which it is better suited. On the other hand, it has resulted in the timberman being able to work a tract clean, since he need not discriminate, for the most part, but can cut nearly all the timber his land carries, knowing that by the use of a preserving treatment he can make practically all of it useful in tie work. Thus, instead of leaving land cumbered with scattered clumps of relatively useless timber, it is all being worked up and put to good use.

Just contrast the situation, as far as utilization of woods is concerned, before treatment was introduced and after. In the first case the materials available were white oak, locust, bois d'arc, heart-wood of the long-leaf pine, swamp-cypress and chestnut. Chestnut that could be used untreated for tie purposes, however, was found principally in the East, the southern varieties giving relatively poor service. The harder chestnut of the eastern sections frequently lasted for eight or nine years. But the kinds named practically close the list.

Today, with preserving treatments used, the tie manufacturer and the railroad are able to utilize all of the black oaks, such as red oak, yellow oak, pin oak, jack oak, etc.; beech, birch, maple, elm, gum, ash, hickory, sassafras, hackberry, poplar and the cottonwood tribe; sycamore, and others of the broad-leaf species, and cone-bearing trees such as the loblolly, shortleaf pine, Douglas fir, tamarack, hemlock and white cypress. Some of these woods would have lasted from three to five years without treatment; with it, they give service of from twelve to twenty years. As many of the kinds named have little value for lumber or other purposes, it is a great economic benefit that they can be put to good use in the railroad tie field through the application of creosote and other preservatives.

Oil of creosote is the generally favored preservative at present, zinc chloride, which has been used to a considerable extent, not having been found altogether satisfactory. It is used by applying a bath containing the salt in solution, the evaporation of the water leaving it in the wood. It is an excellent antiseptic and preserves the wood,

but, being soluble, it is washed out by rains and thus permits the wood to disintegrate.

The process, generally speaking, consists of placing the ties on cars; putting them in hermetically sealed retorts; filling the retorts with oil, and subjecting the ties to heat and pressure, the latter frequently being as much as 170 pounds per square inch. Some methods involved heating the ties beforehand for the purpose of opening the pores as much as possible, but this was found to be hard on the wood and was consequently abandoned.

The industry of wood-preserving, and especially of creosoting ties,

appears to be in its infancy. With the progress that has already been made during the past five years, it seems logical to believe that ultimately the treated tie will be universally used. If this happens, the passing of the years and reaching the end of the period formerly allotted to the untreated tie will find a reduction in the requirements, which will possibly cut the consumption from 125,000,000 to 60,000,000 a year. From the standpoint of conservation this will be an advantage, and especially so since it will postpone still further the necessity for using substitute materials on account of the increasing cost of wood.

W. D. C. Jr.



Fancy Woods for Floors



The Timber News of London, recently gave some valuable hints on fancy woods for floors, from which the following extracts are taken:

The growing popularity of fine hardwood floors has stimulated the utilization of some of the fancy woods for that purpose, especially in the United States. What are known as the "grey woods" have come into fashion recently for flooring. The right tone of soft hue, with shaded streaks of green in it, is difficult to obtain except in Majagua, one of the favorite decorative woods of Cuba. Another fashionable wood for flooring that now enters largely into the trade is Italian walnut. This wood has a beautiful coloring, toned to a fashionable grey tint that forms an admirable background for handsome rugs. Teak is a valuable wood that has long been in general use both for floors and furniture. It is handsome as to grain, and lends itself admirably to the revival of Early English broad-planked floors. These floors have a dark, thin strip of wood inserted between the planks to imitate the ancient joints in old floors. It is being used also to considerable extent for wainscoting and beaming of expensive houses where every effort is usually made to get satisfactory color schemes in woodwork, hence the floors have to harmonize with the beams and wainscot, for which the Philippine teakwood, which strongly resembles Italian walnut in appearance, is used extensively, being an indestructible wood.

More varieties of fancy woods are used today in parquetry flooring than ever before. While the French cling to their oak for

floors, no matter what the surrounding furnishings may be, Americans love to get effects out of every variety of fancy woods to suit their tastes. Almost jewel-like lustre is obtained with some of these fancy woods. For instance, the floors of one mansion in New York are of vermilion color, bordered with a strange peacock-tinted Cuban wood. Another has one floor laid in dark teakwood, a second in oak, and a third in mahogany. Black mahogany is especially in demand in America for flooring in connection with rooms fitted up in Flemish styles. Immense quantities of white and red mahogany are used for floors, and oak and curled maple are popular. Fancy woods are used in a variety of styles of parquetry, including the block, cube, square, basket, Prima Vera, heringbone, and Fontainebleau effects, worked out sometimes at great cost. African tigerwood, African redwood, the greenish-gold Jalapa wood, red gold Courbaril, Sandwich Island walnut, golden ebony, rose red Majagua, and similar rare woods are also used for flooring, as well as for beaming and panelling.

Every effort has been made to imitate these fancy woods by the art of the stainer and painter. Even Circassian walnut, of which there is never much in the market, has a near-Circassian imitation that is frequently found. But imitation never quite succeeds in woods, for the lovely soft effects nature gives cannot be quite obtained by paints or stains. For instance, various kinds of wood have been stained through and through a deep rich mahogany shade, but the grain is always sure to give the imitation away. That is something that cannot be exactly imitated.



The Mail Bag



Any reader of **HARDWOOD RECORD** desiring to communicate with any of the inquirers listed in this section can have the addresses on written request to the Mail Bag Department, **HARDWOOD RECORD**, 537 South Dearborn Street, Chicago, and referring to the number at the head of each letter and enclosing a self-addressed stamped envelope.

B 321—Seeks Hardwood Molding

London, Eng., Oct. 12.—Editor **HARDWOOD RECORD**: We should be glad to be put in touch with some mills within low freight rate distance of Philadelphia, Norfolk or Newport News, who could undertake to produce plain moldings to our patterns cheaply, and smoothly finished in basswood, oak, walnut and possibly mahogany. Our experience has been that the high freight rate to the coast from the Chicago district militates against our purchases there. If the stock is dry and prices and finish satisfactory, we can place a large volume of business.

B 322—Seeks Hickory Flag Poles and Ash Oars

Boston, Mass., Oct. 17.—Editor **HARDWOOD RECORD**: I have an inquiry for hickory flag poles and also ash oars for export trade. Have

you on file anything that would help me out in this matter?

The writer of the above letter has been supplied with a brief list of manufacturers of ash oars, but we have no list of concerns making a specialty of hickory flag poles.—EDITOR.

B 323—Wants Lumber Measure Table

Evanston, Ill., Oct. 18.—Editor **HARDWOOD RECORD**: We are in want of a lumber measure table like the Houghton Measure Table or some other kind on the same principle. If you have such in stock kindly let us know by return mail, or tell us where to get one.

The writer of the above letter has been advised that we are unfamiliar with the Houghton Measure Table, but has been given the name and address of the publishers of Baughman's Buyer and Seller, and of the Expeditious Measurer.—EDITOR.

B 324—Seeks No. 3 Chestnut and No. 2 Spruce

Philadelphia, Pa., Oct. 18.—Editor **HARDWOOD RECORD**: We would be pleased to be put in

communication with anyone desiring to market one-inch No. 3 common chestnut and one-inch No. 2 box spruce in large quantities, for cash.

The writer of the above letter is a leading wholesaler of the Quaker City, and has been given a brief list of chestnut and spruce producers.—EDITOR.

B 325—Wants Wagon Stock

Portland, Ore., Oct. 15.—Editor **HARDWOOD RECORD**: Will you kindly let me know where I can get a list of factories manufacturing all kinds of wagon, carriage and auto woodstock, such as singletrees, poles, shafts, spokes, etc.? I contemplate starting in business handling such products on the Pacific coast, including hardwood lumber.

The writer of the above letter has been advised where he can secure the information he seeks.—EDITOR.

B 326—Wants Hickory Billets

New York, N. Y., Oct. 18.—Editor **HARDWOOD RECORD**: Can you put us in touch with manufacturers prepared to figure on prime second-growth hickory billets, perfectly white clear through, straight grained and free from all defects, 7 to 8 feet long x 4 to 4 1/2 inches wide x 1 to 1 1/2 inches thick?

B 327—Wants to Handle Output of Southern Mills

Springfield, Mass., Oct. 19.—Editor *HARDWOOD RECORD*: We have decided to supplement the handling of the products of our Vermont and New York mills by either jobbing or handling the stock on a commission basis, with oak, chestnut, poplar and gum. We maintain sales offices both in Springfield covering the New England states, and in New York covering New York state. We should be glad to be put in touch with good reliable manufacturers whose output we could either purchase or handle in this territory.

The above letter is from a well reputed hardwood manufacturing house having quarters in the states of New York and Vermont, and the connection should be a desirable one for several southern manufacturing houses producing the wood named.—EDITOR.

B 328—Wants Market for Cedar Sawdust

Manchester, N. H., Oct. 19.—Editor *HARDWOOD RECORD*: Referring to the recent article in *HARDWOOD RECORD* relative to the sale and uses of sawdust. Can you put us in touch with concerns buying Cuban and Spanish cedar sawdust, and also if you know of a machine for grinding small pieces of thin cedar into sawdust?

The writer of the above letter has been advised that a good many proprietary medicine houses and other handlers of bottled goods are large purchasers of cedar sawdust for packing purposes; and that he can secure a small and low-priced hog for reducing shavings and thin lumber into small particles from the Cadillac Machine Company, Cadillac, Mich.—EDITOR.

Company, Chicago, and E. W. Dierssen of the Chicago Sash, Door & Blind Manufacturing Company. An advisory board composed of one lumberman from each state in which the company operates will be maintained.

In the past the casualty insurance companies have indemnified the employer against damage claims for death or injury to employees. This service was often unsatisfactory and always expensive. In fact, it has been shown that under the old rate about sixteen cents out of every dollar finally reached the injured employee, the remaining eighty-four cents going largely to attorneys and agents.

Those employers of labor who have not elected to accept the provisions of certain state compensation laws are deprived of practically all of their former defenses. As a result an injured employee is likely to be given an enormous award by a sympathetic jury. There is a recent case on record in Philadelphia where judgment was given for \$92,000 in a case of partial disability.

The offices of the Lumbermen's Mutual Casualty Company will be on the eighth floor of the Stock Exchange building in connection with the Lumbermen's Association of Chicago.

Memphis Lumbermen's Club Consolidates With Business Men's Club

Indications are that the Lumbermen's Club of Memphis will become a department of the Business Men's Club at an early date. At the meeting at Hotel Gayoso Oct. 12, the first for the fall season, it was unanimously decided that the club would become identified with the Business Men's Club. The only objection urged against the proposed merger was the loss of the identity of the Lumbermen's Club of Memphis. It was pointed out that this organization had played quite an important part in hardwood lumber affairs, not only locally but from a national and international standpoint. However, the committee recommended that the proposition of the Business Men's Club be accepted, despite the fact that it means the loss of such identity.

As offsets to the loss of identity of the club it was pointed out that the consolidation would settle the question of permanent quarters for the Lumbermen's Club and that it would also solve the problem of securing free performance of the heavy work now devolving upon the gentleman who acts as secretary of the organization. It has become increasingly difficult each year to get anyone to accept the position of secretary because of the large amount of work falling upon him without remuneration.

Under the terms of the proposed merger the Lumbermen's Club of Memphis becomes a department of the Business Men's Club. It is, however, to maintain a separate organization. It is to have its own officers and directors and is likewise to operate under its own constitution and by laws. It is stipulated in the agreement that the club also has the right to revert to the present regime if at any time the merger should become unsatisfactory to the members.

The proposition as accepted was made by W. H. Fitabugh, representing the Business Men's Club. He said that it was the desire of the Business Men's Club to be of greater service to the lumbermen as well as to all the other industries in Memphis and that it was the opinion of the directors that this could be accomplished if the organization representing the separate industries identified themselves with the Business Men's Club as separate departments. He referred to the splendid results that had followed the consolidation of the various organizations in other cities, notably Boston, Minneapolis and Cleveland.

It will be necessary to make certain changes in the by-laws of the Lumbermen's Club and a committee was appointed at this meeting to suggest these. After the committee has reported it will require notice of thirty days before a vote can be taken on the proposed change, with



News Miscellany

Northern Association Cut and Shipments for September

A statement of the cut and shipments of lumber, based on reports of fifty-six members of the Northern Hemlock and Hardwood Manufacturers' Association as compiled by that association, shows that there is a decrease in cut from September, 1911, to September, 1912, of thirty-six per cent in hemlock, while there is an increase in hemlock shipments of twenty-one per cent. The hardwood cut fell off during this period eleven per cent, while hardwood shipments increased four per cent. Thus the total cut decreased thirty-two per cent during the year and total shipments increased fifteen per cent.

The following is a tabulated statement of these figures, showing the various woods:

	Cut, M feet.		Shipped, M feet.	
	1912.	1911.	1912.	1911.
Hemlock	31,579	49,090	43,028	35,490
Ash	239	379	783	905
Basswood	1,070	1,603	3,134	3,613
Birch	2,442	3,024	7,551	5,545
Elm	536	685	1,717	1,627
Maple	3,361	2,754	4,984	5,686
Oak	112	46	335	219
Mixed	428	753	3,084	3,260
All hardwoods...	8,188	9,244	21,588	20,855
Total	39,767	58,334	64,616	56,345

New Lumbermen's Casualty Company

The Lumbermen's Mutual Casualty Company is the style of a new incorporation in Chicago designed to write employers' liability and workmen's compensation insurance. The company is backed entirely by the local lumber trade, men prominent in the local business being officers and directors. The actual business of the company, however, will be handled by experienced insurance men. A policy against the employment of solicitors was adopted, it being decided to secure business only through the mails and through the efforts of inspectors. Thus a considerable item of expense will be entirely eliminated. It is intended to accept only preferred risks, thus keeping to a minimum the loss ratio. It is anticipated that the loss thus saved, together with natural profits, will accrue to the policyholders as cash dividends.

As in all lines of business, the tendency in insurance is toward specialization, the idea being to give greater efficiency in one particular line of risks rather than to cover a larger field not so thoroughly. Thus all the risks of this concern will be confined to the woodworking industries. Special service will be rendered by inspectors who will be so qualified as to show policyholders ways and means of reducing hazard and thus cutting down insurance cost. As the

company will write no business outside of the lumber trade, the lumbermen will not be compelled to make up to the insurance company any losses sustained on unprofitable business which it might have on other grades of risks.

The company will qualify as a regular incorporated mutual under the insurance laws of Illinois. These statutes require that a sufficient amount of business on enough separate risks to make the company sound from an underwriting standpoint, shall be secured before any policies are issued. The necessary volume of business has already been more than subscribed and the company will start out more auspiciously than did the very successful lumbermen's fire insurance companies. Admission will be taken shortly to both Wisconsin and Michigan, and other states that have compensation laws will be entered as it proves practicable. Many states that have not as yet enacted compensation laws will probably pass them at coming sessions of the legislature. As these laws go into effect, the already high rates on employers' liability insurance jump from three to five hundred per cent, making the burden on the business extremely heavy. To meet this condition, flour millers recently organized a casualty company to write exclusively in that trade. It began business five months ago and, though the time has been too short to say just what the results will be, a very substantial saving in the cost of insurance will be effected by the company. Printers have already organized on this basis and other trades are considering similar steps.

Like the lumber mutual fire insurance companies, the policy of the Lumbermen's Mutual Casualty Company will be to maintain all reservations required of stock companies and a sufficiently large surplus to guarantee solvency, the officers and directors recognizing first, absolute security and second, cost.

The officers of the newly formed company are: President, F. L. Brown of Crandall & Brown, Chicago; first vice-president, James S. Kemper, manager of the Lumbermen's and Manufacturers' Insurance Agency, Chicago; second vice-president, E. F. Hunter of H. & E. F. Hunter, Chilli-cothe, Ill.; third vice-president, C. B. Moore of the C. B. Moore Lumber Company and the Alexander Lumber Company, Aurora, Ill.; treasurer, Murdock McLeod of the Oconto Company, Chicago; secretary, E. E. Hooper, secretary of the Lumbermen's Association of Chicago.

Elmer H. Adams, Chicago's prominent lumberman-lawyer, will act as general counsel for the company. In addition to the above mentioned officers, the directorate will consist of C. A. Flannagin of the Rittenhouse & Embree

the result that the consolidation can not become effective until the latter part of November.

C. D. Hendrickson, chairman of the river and rail committee, reported that during the interval between the last spring meeting and the first meeting for the fall season, he and his associates had completed the launching of the Lumbermen's Traffic Bureau and had also successfully opposed the proposed advance in freight rates to Canadian points, having secured an order from the Interstate Commerce Commission suspending the advance until later.

J. W. McClure, chairman of the special committee appointed to look after estimated weights on hardwood lumber shipments, said that the Interstate Commerce Commission had notified him that there would be a hearing in Memphis December 13-14, in connection with this subject. The committee was continued in power and was instructed to prepare the necessary evidence to be submitted to the commission.

James E. Stark spoke vigorously in behalf of the Lumbermen's Traffic Bureau, declaring that it would prove a big factor in the handling of the transportation problems of the lumbermen of Memphis and vicinity if they gave the proper support to those in charge thereof. He thought that it ought to be used on every possible occasion and that, if the lumbermen assumed this attitude, the results would be highly gratifying as well as extremely beneficial.

Mr. Stark also addressed the club in connection with the alleged high rates charged by the insurance companies. He declared that the rates were out of all proportion to the risks involved. In fact he said that some of the companies realized that they were charging entirely too much and they were adopting flat rates and substituting these for the regular schedules. He thought the law and insurance committee of the club ought to take this matter up with similar committees of other organizations throughout the country to the end that insurance rates might be placed on a level more just and equitable to the insured.

J. H. Townsend, general manager of the newly formed Lumbermen's Traffic Bureau, made a brief talk in which he said that it was his desire to do everything he could for the lumbermen from a traffic standpoint. He made an appeal to the individual lumbermen and lumber firms to call upon the bureau whenever it could be of service to them.

The club also adopted resolutions opposing the granting of a charter to the terminal company of the Rock Island System unless proper safeguards were contained therein on behalf of the city of Memphis. Special reference was made to the right of the city to collect taxes from the western roads. Emphasis was also laid upon the fact that, if such a charter is granted, the terminal company ought to guarantee that all roads seeking entrance into Memphis may have the use of these terminals. This action was taken because of the belief in some quarters that the Rock Island System and some of the other roads were seeking by means of this proposed terminal company to sever direct relations with the city of Memphis, transacting all business through the terminal company instead of through their own organizations. The club instructed the secretary to send a copy of these resolutions to the officials of the roads interested. In addition to this, the resolutions provide that the law and insurance committee of the club shall appear before the commissioners of the city of Memphis when the charter hearing comes up.

Two new members were elected: A. J. Tippler of Forrest City, Ark., manager of the Forrest City Manufacturing Company and the Wisconsin Lumber Company, and T. E. Jones of the F. T. Dooley Lumber Company.

Meeting St. Louis Lumbermen's Club

The Lumbermen's Club of St. Louis held its last meeting at the Planters hotel, on Oct. 15.

After the usual dinner, President Rolfes called the meeting to order and the minutes of the previous meeting were read and approved.

Julius Seidel, president of the Julius Seidel Lumber Company, gave a report of the National Conservation Congress meeting held at Indianapolis recently, to which he was appointed a delegate.

The following names were read by the secretary as having been passed on by the board of directors for membership. They were submitted by the membership committee and were unanimously elected to membership: J. F. Schneiders, Frost-Johnson Lumber Company; C. C. Mullen, Long-Bell Lumber Company; W. F. Biederman, National Lumber Manufacturers' Credit Corporation; A. V. Lashly, National Lumber Manufacturers' Credit Corporation; H. R. Asman, Colonial Lumber and Timber Company; A. C. Baird, Baird & Brown; Max J. Mosher, Mosher & Shields; W. B. Switzer, W. B. Switzer Lumber Company; B. O. Leftwich, Leftwich Lumber Company; J. K. Wesson, J. J. Newman Lumber Company; W. M. Stephenson, Scrivenor, Concatenated Order of Hoo Hoo; Charles C. Curry.

Secretary Kessler read the report of the special committee which had been named to revise the by-laws of the club. A minority as well as a majority report was submitted. Action on the report will be taken at the next meeting.

Resolutions on the death of Christian F. Liebke were then adopted by a rising vote.

E. C. Robinson offered a resolution, which was passed unanimously, extending the thanks of the club to the delegates to the National Conservation Congress, Julius Seidel and John B. Kessler. He also called the attention of the members of the club to the convention of the Federation of Retail Merchants, which will be held in St. Louis, November 19-21.

James E. Gatewood spoke of the error of the Interstate Commerce Commission in its decision in the eighteen-cent freight rate. He also spoke of other rates advanced by the railroads in spite of the orders of the commission and stated that other advances were contemplated by the railroads. Mention was also made of what the shippers in the Southwest had to go against.

W. E. Barnes then told of the lumber trade conditions as they were at the present time. This brought the meeting to a close.

Action Against Railroads

The first attempt of the National Lumber Exporters' Association to proceed against the railroads with terminals at New Orleans and against a number of others as well on account of their refusal to issue through bills of lading has resulted in failure, the Interstate Commerce Commission, which was asked to suspend the new tariffs filed with the commission because they eliminate the provision for through bills on lumber and logs, having refused to issue such an order. The National Lumber Exporters' Association will now go ahead and file formal complaint against the new tariffs as an unwarranted discrimination against lumber and logs, and the question will be fought to an issue on its merits. The association had sought by the first petition to prevent the new tariffs from going into effect on Oct. 15. It was unable to do this, but the Interstate Commerce Commission announced that its refusal to order a suspension was without prejudice to the National Lumber Exporters' Association, and that a petition asking for the cancellation of the tariffs at least in so far as they allow for through bills of lading on other freight and deny them on lumber and logs could be submitted. There is every prospect, however, that the action contemplated will be taken this week. In the first petition only the railroads west of the Mississippi river with terminals at New Orleans were included. The new complaint, however, will be general, applying to all of the railroads that carry export lumber, it being the purpose of the National Lumber Exporters' Association to

fight the discrimination against lumber and logs as unjust and as highly injurious in its effects upon an important division of commerce. There is also pending a petition against the Southern Railway, asking the Interstate Commerce Commission to issue an order requiring the railroad to comply with the provisions of its tariff which has been in effect for a number of years and to declare that the recent notification to shippers of lumber and logs that after a certain date no through bills of lading would be issued except under regulations practically prohibitive, is not in effect a tariff filed with the commission and does not supersede the old schedule. It will be observed that the two petitions filed differ, one charging discrimination, while the other asks that the railroad complained of comply with its tariff requirements. The association realizes that the commission has no authority to order railroads to issue through bills of lading, but it takes the ground that as the railroads have undertaken to do so with respect to other classes of freight, they can be compelled to grant the lumber exporters the same privilege. Efforts have been in progress a long time by President Harvey M. Dickson and Secretary J. McD. Price of the National Lumber Exporters' Association to get the railroads to give the shippers of lumber and logs fair treatment, but the railroads have persistently refused to meet a demand which the exporters feel is in every way equitable.

Philadelphia Lumbermen in Golf Tournament

The Philadelphia Lumbermen's Golf Club held its regular meeting and tournament at the Huntingdon Valley Golf Club grounds, Oct. 16. The weather was ideal and the game was entered into with a hearty athletic zeal. As the tantalizing bunkers, sand holes and ditches were profuse on the eighteen hole course, the sharpest attention was required on the part of the player if a fair score would be made. Thirty-six golfers divided into eight foresomes and two twosomes started on a handicap game at one p. m. The contest continued with good natured rivalry until about half past five o'clock, when the last bunch handed in their score card.

The game resulted in the following net scores: Horace A. Reeves, Jr., 110; Frank Buck, 109; Eugene W. Frey, 99; W. Henry Smedley, 123; J. Deland Williams, 102; Eli B. Hallowell, 84; J. Craig Huff, 94; James Crowell, 109; John H. Schofield, 98; T. U. Nixon, 96; William P. Shearer, 109; Robert W. Schofield, 95; S. P. Bowers, 93; Thomas E. Coale, 94; William Allen, 102; Joseph P. Comegys, 115; F. A. Benson, 108; Edward Swenk, 90; John E. Howes, 88; George M. Spigle, 86; Ben C. Currie, 96; W. H. Fritz, 93; W. L. Rice, score not given; J. W. Turnbull, 80; J. B. McFarland, 90; M. C. Burton, 97; H. W. Smedley, 91; Joseph W. Janney, 91; E. B. Humphreys, 91; H. R. Humphreys, 100; Harry Humphreys, 96; Frank E. Schofield, 93; William Meyer, 108; Frank R. Whiting, score not given; George W. Stoker, 117; Benjamin Stoker, 137.

The prizes awarded were: J. W. Turnbull, first prize, a cigar stand; Eli B. Hallowell, second prize, a golf ball marker. For best ball forward, W. H. Smedley and J. B. McFarland were awarded golf gloves.

After a sumptuous dinner, the meeting was called to order by President Frank Buck. The minutes of the previous meeting were read, after which the completed list of by-laws were unanimously adopted. A resolution was passed to hold the next and final tournament in November, at the Merion Golf Club grounds.

A Lively Entertainment at the Chicago Lumbermen's Club

Saturday evening, Oct. 12, was the date of a highly satisfactory effort on the part of the entertainment committee of the Lumbermen's Club of Chicago to demonstrate to the members what

a thoroughly live proposition the club is. The arrangement of the club rooms is particularly well adapted to entertainments of this sort, a temporary stage being erected at one end of the dining room, which stage was equipped with all the necessary appurtenances. Four or five features were provided by professional talent secured through the committee's efforts. A pleasant feature of the entertainment was the absence of anything distasteful in the efforts of the entertainers, which is not always the case at such functions. Light refreshments were served in connection with the show, and the members were provided with means of making a considerable quantity of smoke.

A hearty good feeling seemed to prevail and the programme went off without a hitch of any kind. The efforts of the long famous "Bill" Eager met with the usual warm reception. Wallace Kimball also caused considerable merriment by his imitation of animals.

Rebuilding Montvale Lumber Company's Plant

Work has been commenced on the reconstruction of the sawmill of the Montvale Lumber Company, an allied concern of the R. E. Wood Lumber Company, of Baltimore, at Fontana, Swain county, N. C., the idea being to enlarge the capacity of the plant. Though erected on the old site, the mill, when finished, will be virtually new, with concrete foundations, concrete and sheet iron boiler house, the improvement various poplars, such as aspen, Balm of Gilead, being of a more permanent character than the great majority of such plants. The chief idea in making the improvement was to augment the production, the demand for hardwoods having been so good this year as to render the enlargement necessary. Machinery of the latest improved type will be installed, the plant being what is called an eight-inch Clark band, with an output of about 50,000 feet per day. The work of construction is under the personal direction of G. L. Wood, general manager of the company, who has recently returned from an extended trip to western North Carolina, Mississippi, Louisiana, Tennessee and other states, studying sawmill conditions and other trade matters. The journey was attended with more than ordinary discomfort as Mr. Wood had the misfortune to fall down a steep bank in the mountains some weeks ago and badly wrench his left arm. R. E. Wood, president of the company, left for Fontana this week. The Messrs. Wood report that all of their company's mills are cutting more lumber than at any previous time this year and that the outlook is most encouraging.

Posts of Scrub Timber

A circular recently issued by the New York College of Forestry at Syracuse, gives advice to the farmers of that state which is valuable to the farmers of most other states. They are urged to make use of cheap and inferior woods for fence posts, first having treated them with creosote to hinder decay. The species which are pointed out particularly are soft maple, basswood, willow, and elm. Large amounts of these woods grow in scattered stands, or in waste places, and are not generally put to any good use, because it does not pay to bring them together. Often they are too small for any use except posts. As is well known, these woods last only a short time if set in the ground in their natural condition. They are among species which decay most quickly. Ordinarily, no one would make posts of them, because they last so short a time that their use is unprofitable. By means of a cheap treating plant which a farmer can equip in his barnyard, posts may be treated at a cost of from four to six dollars a hundred. The treatment makes them last two or three times as long as they will serve in their natural state. Many other woods of the same

class are found on the farms, along creeks, and in waste places in this country. They will respond to the treatment which preserves them. Among others are cottonwood and the various poplars, such as aspen, Balm of Gilead, Carolina poplar and Lombardy poplar; buckeye, sycamore and pine.

A Progressive Company

The Henry C. Patterson Company, reorganized some months ago with Frank R. Whiting, president, Chapin L. Barr, vice-president, and Albert W. Wasey, secretary and treasurer, has made considerable improvements in its yard. It has also changed the character of its business; instead of North Carolina and yellow pine, hardwoods and white pine are handled. However, the company will continue to ship the first named southern pine in carload lots. It carries 2,000,000 feet of hardwood and Wisconsin white pine in stock, and has a large dry shed with twenty-four dust proof bins for the protection of a quantity of hardwood flooring and several thousand feet of lumber. Mr. Wasey, who is known as one of the young hustlers in eastern lumber circles, is a hard man to catch at his office, as he is always on the job. He says the company has had very little trouble disposing of dry hardwoods, and its white pine stock is moving nearly as fast.



A REMARKABLY LARGE OAK LOG

A Big Oak Tree

The loggers of the Lamb-Fish Lumber Company of Charleston, Miss., in this region of big oak, recently encountered a remarkably large and fine specimen of the cow oak variety, which was felled and put into log lengths and transported to the company's big mill. A picture of the second cut of this tree is shown herewith. The log was seven feet in diameter. Manager Burke says that this sized saw-log does not particularly appeal to him as a source of money-making. The log haul-up took the log up to the head of the slide without difficulty, and then the first thing that happened was that the end of the sawmill had to be knocked out to get the log onto the log deck. After the nigger threw the log onto the carriage, it was found that there was not room enough between the wheels of a nine-foot band mill to permit the passage of the log between them, so it had to be returned to the deck, and with wedges and beetles split in half before it could be handled. Mr. Burke says it would have been economy to have left the tree in the woods as a monument to what northern Mississippi lands will produce in the way of oak, rather than to have accomplished its removal to the mill.

Foreign Trade Opportunities

A business man in the United Kingdom, listed as No. 9614 under Foreign Trade Opportunities in the Daily Consular and Trade Reports published at Washington, D. C., is in the market for hardwood, tool-handle stock and cooperage stock. He wants to be placed in touch with manufacturers and exporters of hardwood logs and lumber, tool handle stock and cooperage stock, and is in immediate need of 2 to 4-inch, 10 to 16-foot ash plank, and 5 to 12-inch white oak wagon plank.

A company in the United Kingdom wants to be placed in communication with exporters of pitch pine timbers and lumber, ash, oak and red gum lumber and logs. It is also desirous of investigating Montana larch and Pacific coast white and sugar pine lumber. The enquiry is No. 9616.

Under No. 9617 is a firm which wants to get in communication with manufacturers of oak barrel shoos for use by chemical manufacturers. These shoos must be 1 by 2½ to 5 inches by 44 inches long. Each shoos must contain enough stock to produce a barrel with a circumference of 36 inches at the head and 44 inches at the bulge. The staves must be shaped and must be of white oak or any other close grained oak. The same firm wants 5 by 12 white oak wagon plank, and 2 to 4-inch and 10 to 16-foot ash plank.

A Change in Arkansas

The Leavitt Land and Lumber Company, Dermott, Ark., has appointed W. L. Briscoe secretary and manager in charge of its big band mill operations at that place.

Mr. Briscoe has been connected for some time with the Paepcke-Leicht Lumber Company, having been in its employ for the last eighteen years. He was assistant superintendent of the Blytheville, Ark., plant and subsequently manager of the Arkansas City and Greenville, Miss., operations. Mr. Briscoe left the employ of the Paepcke-Leicht company some time ago, with the idea of manufacturing a quantity of stumpage owned by his father. Negotiations were opened between him and the Leavitt Land and Lumber Company upon the completion of these operations.

Mr. Briscoe is not only an able and widely known lumberman, but is an ardent supporter of the Hoo-Hoo.

September Inspection of the National Association

The statement of hardwood inspection by the National Hardwood Lumber Association, issued from the offices of Secretary F. F. Fish, shows that the inspection bureau of the association inspected 20,639,850 feet during September, 1912. This establishes a new record and is an increase of 2,598,298 over August, 1912, the previous high month.

Ten new applications for membership to the association have been received since the last report. This brings the total of new members admitted since the convention of June 7 to forty-four.

The report deplored the practice which apparently is somewhat common among non members, to secure national inspection through members, thus avoiding for themselves payment of membership dues. The members were urged to decline such requests.

The report noted the resignations of inspectors W. H. Long of Pittsburgh, and C. H. Maddox of Savannah, Ga. N. W. Rice of 918 West North avenue, Pittsburgh, was appointed to take charge in place of Mr. Long. Inspector J. L. Benson, formerly at Alexandria, La., has been transferred to New Orleans as assistant to C. E. McSmith, whose address is 5252 Constantine street, New Orleans.

Creditors Victors in Cincinnati Suit

United States District Judge Hollister recently returned a decision in favor of the creditors of

the defunct I. M. Asher Lumber Company of Cincinnati, whereby the Farmers and Traders National Bank must turn over to the creditors a sum of \$10,500, which is the remainder after deducting from the original creditors' claim, \$6,000 loaned by the bank to the company, to which the trustee decided the bank was entitled. Thus, unless the decision is reversed in the court of appeals, the creditors will receive a considerable dividend on their claims.

At the time of its bankruptcy, the I. M. Asher Lumber Company owed \$25,000 and had assets of \$2,500. During the two years and a half during which it existed, the company had paid considerable money to the Farmers and Traders National Bank. After the liquidation of the company, the trustee sued the bank on the grounds that the checks as paid over to it by Mr. Asher were on account of his personal indebtedness to the bank, and not for any obligations incurred by the company. The trustee maintained in his suit that the payment of \$16,000 in this manner had so undermined the financial condition of the company that it necessarily had to liquidate.

A Hustler in the Trade

The Hadentine Lumber Company, Inc., 305 Market street, Camden, N. J., was recently



HARRY R. HUMPHRIES, PRESIDENT
HADENTINE LUMBER COMPANY,
CAMDEN, N. J.

reorganized with Harry R. Humphreys as president. Mr. Humphreys is recognized as one of the progressive young business men, both in his widening connection with the eastern lumber trade and his ability as a financier. A few years ago he owned the Hadentine Lumber Company, a trade style he assumed, with offices in the Arcade building, Philadelphia, where he also represented the Norva Land & Lumber Company of Baltimore. The business grew rapidly and recently the above new company has been formed under the old name style and capitalized at \$125,000. The officers are Harry R. Humphreys, president; Leroy Harvey, treasurer, and Wilfred B. Wilcott, secretary. The company will handle hardwoods, spruce, hemlock and North Carolina pine. The personnel of the new company is individually interested in lumber mills at Norfolk, Va., Sunburst and Trestmont, N. C., Horton, Dobbin and Laneville, W. Va., with an annual cut of over 200,000,000 feet of lumber. Headquarters will be continued for a time at the Camden address.

Mr. Humphreys is a director in the Merchants Trust Company, vice-president of the Camden Merchants Building Association, a member of the Board of Trade and is financially interested in several other institutions.

Baldwin Locomotive Works Active

Activity at the Baldwin Locomotive works, Philadelphia and Eddystone, Pa., continues without abatement. Orders are constantly coming in, and both plants are being worked to full capacity. Contracts were recently closed for twenty-five locomotives for the Erie Railroad, which will cost about \$500,000; six locomotives for the Lehigh & New England road; three for the Louisville, Henderson & St. Louis; five for the Washington Southern, and one for the Mobile & Ohio. It is evident that the railroads are determined to provide for the needs of next winter's heavy traffic.

Statement of Ownership and Management

Agreeable to the act of congress of Aug. 24, 1912, requiring publishers of periodicals to file with the postmaster general and the postmaster in the office at which such publication is entered, a sworn statement setting forth the names and postoffice addresses of editors and managing editor, publisher, business manager and owner, and in addition the stockholders, if the publication be owned by a corporation, and also the names of known bondholders, mortgagees, or other security holders, and that such sworn statement shall be published in such newspaper or other publication, the following sworn statement is herewith printed:—

HARDWOOD RECORD is published twice a month at Chicago, Ill.

The names and postoffice addresses of the editors are as follows:—

Henry H. Gibson, editor and business manager, 4649 Woodlawn avenue, Chicago, Ill.

Hu Maxwell, 927 Ashbury avenue, Evanston, Ill., associate editor.

E. W. Meeker, 4758 Magnolia avenue, Chicago, Ill., associate editor.

Publisher: The Hardwood Company, 537 South Dearborn street, Chicago, Ill., the officers of which are Henry H. Gibson, president; E. H. Defebaugh, vice-president; Burdis Anderson, secretary and treasurer.

Stockholders holding one per cent or more of total amount of stock are Henry H. Gibson and E. H. Defebaugh.

There are no known bondholders, mortgagees and other security holders holding any bonds, mortgages or other securities of this company.

(Signed) Henry H. Gibson,
Editor and Business Manager.

Sworn to and subscribed before me this 7th day of October, 1912.

J. S. Pennington,
Notary Public.

My commission expires October 24, 1912.

The Demise of E. E. Goodlander

Universal regret, not only in his home city, but over a large portion of the United States, where he was known and most highly respected, was occasioned by the death on Friday morning, October 18, of E. E. Goodlander, at his home in Memphis, Tenn. His death was due to an illness of several weeks of meningitis. He was attacked by this dread malady while at lunch at the Peabody hotel about three weeks ago, and regained consciousness for only a few hours since that time. Early last week it was thought he was better, but death suddenly overtook him.

Mr. Goodlander was president of the Goodlander-Robertson Lumber Company, one of the foremost jobbing hardwood houses of Memphis, which has been built up to a substantial and important institution largely through the personal efforts of its founder.

The funeral services were held from the family residence on Saturday, and the remains placed in a temporary receiving vault in Forest Hill Cemetery. Later they will be transferred to a permanent resting place in a handsome mausoleum.

The popularity of Mr. Goodlander in life was attested by the many handsome floral offerings received at time of his funeral from both Mem-

phis friends and others outside of the city. One of the most beautiful of these tributes was given by the Lumbermen's Club of Memphis.

The active pall bearers were: E. E. Gary, C. L. Wheeler, C. T. Whitman, C. D. Gladden, F. E. Stonebraker, W. A. Ransom, A. N. Thompson and F. B. Robertson. The honorary pall bearers were: J. W. Dickson and the former presidents of the Lumbermen's Club of Memphis, as follows: J. W. Thompson, E. T. Bennett, E. E. Taenzer, Geo. D. Burgess, W. H. Russe, Geo. C. Ehemann, W. R. Barksdale, S. B. Anderson, W. L. Crenshaw, James E. Stark and S. C. Major.

Mr. Goodlander was born at Fulton, Ill., in 1861, but when a boy removed with his parents to Fort Scott, Kan. His first venture in business was in association with his father who was a prominent manufacturer of furniture. He continued in this line until 1889 when he came to Memphis as traveling salesman for I. M. Darnell & Son. In 1892-94 he was the manager of the Eaton-Darnell Table Company, and in 1895 again filled the position of traveling salesman for the former firm. In 1900 he and Frank B. Robertson formed the Goodlander-Robertson Lumber Company, of which he was secretary and treasurer. Mr. Robertson withdrew from the firm in 1907 when Mr. Goodlander became president, being



THE LATE E. E. GOODLANDER, MEMPHIS,
TENN.

succeeded by L. W. Ford as secretary and treasurer. He continued at the head of the company until his death.

Mr. Goodlander was twice married. His first wife, who died in 1892, was Miss Elizabeth West, and three children survive that union, Misses Catherine, Sabra and Patience. His second wife was Mrs. Evelyn Knapp who had two children at the time of the marriage.

Mr. Goodlander was prominently identified with the Lumbermen's Club of Memphis, of which he was a charter member and which he served as president for one year. His house was a member of the National Hardwood Lumber Association, the National Lumber Exporters' Association and the National Wholesale Lumber Dealers' Association. He was also a member of the following other lumber organizations: Lumbermen's Club, Chicago; Lumbermen's Club, New York City, and the American Club, Mexico City. The Business Men's Club of Memphis also claimed him as a member as did the Tennessee and Chickasaw clubs, both social organizations.

Not a death has occurred in the ranks of the hardwood fraternity for years that has caused such universal sorrow in the trade as that of Mr. Goodlander. Such was his character, and such the appreciation in which he was held by all

clements of the trade, that it is doubtful if ever an unkind word was uttered against "Goody," as he was affectionately known to his familiars. He was a man of rare fore-sight and ability in his calling, and in the fraternity was regarded as an authority on every subject pertaining to both the purchase and marketing of hardwoods. His loss is not only a shock to the lumber trade, but constitutes a permanent bereavement from which both his home associates and the trade at large will not recover for a long time.

HARDWOOD RECORD voices the sentiment of every man who knew E. E. Goodlander in saying: "Adieu, old friend, we cannot say goodbye."

Building Operations for September and Preceding Nine Months

The American Contractor of Chicago, in its building report covering thirty-six cities throughout the country, establishes a decrease of 7 per cent for September as compared with September, 1911. On the other hand, the nine months including September showed an increase of 4 1/2 per cent as compared with the same period of last year. Memphis, Tenn., led for the month of September with an increase of 133 per cent. Other cities showing a decided gain for that month over September, 1911, were Birmingham, Ala., 95 per cent; Cleveland, with 55 per cent; Worcester, Mass., 71 per cent; Scranton, Pa., 67 per cent; Pittsburgh, 65 per cent. Toledo, O., shows the greatest increase during the first nine months of the year, building operations in that city being 60 per cent greater than for the first nine months of 1911. The detailed figures for September, 1911 and 1912, are shown as follows:

City.	September, 1912.		Per Cent.
	Cost.	Gain Loss	
Akron	\$ 335,650	\$ 261,995	25 ..
Atlanta	568,587	487,087	16 ..
Baltimore	669,760	636,843	5 ..
Birmingham	470,262	240,792	95 ..
Buffalo	838,000	991,000	.. 15
Cedar Rapids	330,000	171,000	92 ..
Chicago	7,210,900	7,613,100	.. 5
Cleveland	1,379,315	888,440	55 ..
Columbus	513,025	510,779	1 ..
Dallas	351,225	398,972	.. 12
Denver	331,600	433,150	.. 23
Detroit	1,841,800	1,387,680	32 ..
Duluth	85,408	319,727	73 ..
Ft. Wayne	354,340	166,200	11 ..
Grand Rapids	264,130	240,993	9 ..
Harrisburg	101,050	80,975	25 ..
Hartford	437,530	517,610	.. 15
Indianapolis	1,000,540	750,280	33 ..
*Kansas City	959,774	4,894,629	.. 80
Memphis	644,515	276,440	133 ..
Milwaukee	823,989	1,222,159	.. 32
Minneapolis	1,211,075	1,002,850	20 ..
Nashville	84,144	101,297	.. 16
Newark	708,625	515,201	37 ..
New Haven	325,765	434,568	.. 37
New Orleans	211,170	297,560	.. 29
Norfolk	97,740	156,354	.. 37
New York	13,047,378	15,005,543	.. 13
Oakland	646,436	500,708	29 ..
Omaha	476,050	464,658	2 ..
Philadelphia	2,798,700	2,390,885	17 ..
Pittsburgh	1,343,749	826,036	65 ..
Portland, Ore.	909,595	1,462,920	.. 37
Rochester	969,936	882,267	9 ..
St. Louis	1,248,763	1,490,995	.. 16
Salt Lake City	227,975	192,000	18 ..
San Antonio	151,592	148,611	2 ..
San Francisco	1,733,145	1,634,048	9 ..
Scranton	159,375	94,922	67 ..
Seattle	607,870	462,051	31 ..
Shreveport	86,590	86,323	..
Toledo	336,605	345,873	.. 2
Wilkes-Barre	175,298	136,568	20 ..
Worcester	591,202	344,260	71 ..
Total	\$47,710,178	\$51,467,239	.. 7

*Kansas City permit for Union Depot Sept. 1911, \$4,051,000.

Cutting the Cost of Clearing Logged-off Lands

The constantly increasing acreage of logged-off lands has made it imperative that some means for economically and rapidly cleaning these lands be available. Various devices have been employed with varying success but none has proved entirely efficient. It is now announced from the office of the Clyde Iron Works at Duluth, Minn., that that company has perfected a device for pulling stumps and clearing land, skidding the stumps to the machine and putting them in large piles, thus enabling the machine

to clear from three to six acres at one setting. The machine has been successfully demonstrated for the past two or three years and gives every promise of revolutionizing the attitude of the lumberman toward his cut over holdings.

Each of these machines is designed as an independent power unit complete in itself and readily portable even over the roughest and most swampy country. It is mounted on broad steel runners which are part of the frame-work of the machine. Outside of this base the machine somewhat resembles an ordinary skidder as it is equipped with boiler, engine, drums and cable. Some of the types manufactured are the single line skidder, the double line skidder, the double line skidder with mechanical out-haul, and the right of way skidder. Any of these machines equipped with three drums may be used for pile driving and for handling orange-peel buckets for digging lateral ditches in drainage work and other excavation.

It has been demonstrated that the cost of clearing cut-over land with these machines is approximately half what it would cost under the same conditions with hand labor. In connection with the operation of the skidder, a specially designed steam stump puller has been put on the market. This machine is equipped with double cylinder three-drum engine. The main cable is geared to two speeds, the low speed with a maximum capacity of 112,000 lbs. and the high speed with a maximum of 16,000 lbs. Thus the engineer can pull his stump at slow speed and then skid it to the pile at as great speed as 300 feet a minute.

An Advanced Idea of Accident Prevention

It has been preached for years that the surest way of eliminating the wasted time and money contingent upon industrial accidents is to prevent such accidents themselves. By eliminating or at least reducing to a minimum the accidents to industrial workers, it of course follows that the question of expense and inconvenience will be reduced proportionately. It is with this in view that a number of states have inaugurated educational methods tending to increase the interest in this vital question and to establish uniform methods of controlling as much as possible the possibilities of industrial accidents.

The state of Illinois, however, is the first to establish an official state school for the study and prevention of industrial accidents and of diseases directly resulting from any particular occupation. The school was opened on October 14, having been established under the Illinois Occupational Disease Law and the Health, Safety and Comfort Law, which legislation compels the state factory inspector to see that every known health and safety device is installed wherever required throughout the state.

To carry out this new idea to a successful conclusion, it will be necessary that the state inspector be a proficient instructor as well as a mere policeman. The school will embody such features as a technological laboratory for the study of the causes of industrial accidents and ill health, and a lecture room for public lectures to foremen, superintendents and others directly responsible for accidents. Drafting rooms in which new ideas in woodworking machinery guards and other safety devices can be worked out will be provided by the state. In addition, bulletins of the department of state factory inspection will be sent free to manufacturers, workers and others interested.

The headquarters of the school are on the fifteenth floor of the Transportation building, Chicago, and are under the direct charge of the state factory inspector. The value of this unique innovation in industrial advancement is apparently without any grounds for argument. With the idea itself already established, it remains for those in charge to keep this department as free from political influence as possible in order to accomplish a high degree of efficiency and effectiveness.

Miscellaneous Notes

The Gray Lumber Company of Waverly, Va., recently suffered a loss by fire.

The Olney Cabinet Company, Olney, Ill., has been incorporated with a capital stock of \$50,000.

Lambert E. Barnes of Greenwood, Miss., has recently added a woodworking department to his plant.

Wm. P. Braun of Morrill, Me., is planning the establishment of a dowel factory in the near future.

The Boston Furniture Company has been incorporated at Boston, Mass., with a capital of \$100,000.

A new concern for Fonthill, Ky., is the Fonthill Spoke Company, incorporated with a capital of \$6,000.

The Ross Chair Company was recently incorporated at Louisville, Ky., with a capital stock of \$60,000.

The Maris Hardwood Company has entered the wholesale hardwood lumber trade at San Francisco, Cal.

The Maple City Manufacturing Company has recently commenced the manufacture of tables at Milford, Ind.

The Pine Bluff Spoke Company, Pine Bluff, Ark., was recently incorporated with a capital stock of \$30,000.

The Miller & Nickel Company was recently incorporated at New Albany, Ind., for the manufacture of vehicles.

A new concern to incorporate at Centerville, N. Y., is the Centerville Woodwork Company; capital stock \$10,000.

The Vincennes Novelty Manufacturing Company has been incorporated at Vincennes, Ind., with a capital of \$10,000.

J. Elwood Cox of High Point, N. C., has recently purchased a site on which he plans to build a shuttle block factory.

A new concern to enter the furniture manufacturing trade at Baltimore, Md., is the Chesapeake Manufacturing Company.

The Dorman-Eicle Manufacturing Company, Houston, Tex., has been incorporated for \$10,000 to manufacture woodwork, etc.

The Hardwood Manufacturing Company has been incorporated at Manchester, Tenn. The company is capitalized at \$35,000.

A new concern to incorporate at Boston, Mass., is the Hills Couch-Chair Manufacturing Company. It is capitalized at \$100,000.

A new concern to incorporate at McMinnville, Tenn., is the McMinnville Manufacturing Company, with a capital stock of \$20,000.

Fire recently damaged the plant of the Buffalo Maple Flooring Company, Chicago and Mackinaw streets, Buffalo, to the extent of \$3,000.

The Bovill Wood Products Company recently commenced business at Bovill, Idaho. The company will manufacture wood specialties.

The sawmill of the Napoleon Lumber and Handle Company, Napoleon, O., was recently destroyed by fire. The plant was fully insured.

John Obrecht Sons Manufacturing Company is planning the erection of a factory at Tell City, Ind., for the manufacture of wooden lawn swings.

The Arkansas Veneer Company of Helena recently filed an amendment to its charter, increasing its capital stock from \$20,000 to \$40,000.

The plant of the defunct Jamestown Veneer and Panel Company, Jamestown, Pa., has recently been purchased by Calfish Brothers of Union City, Pa.

The Shaw-Walker Company, manufacturer of filing cabinets, is planning the erection of a \$100,000 addition to its factory at Muskegon, Mich., in the near future.

The J. L. Pease Company, manufacturer of columns at Berwick, La., has been succeeded by the Pease-Gilmore Column Company, which is incorporated with a capital of \$15,000.

The Hardwood Flooring Company, Inc., was

recently organized at Roanoke, Va. S. D. Ferguson is president of the company; H. O. Spangler, vice-president; J. A. Martin, secretary.

The Hardwood Manufacturing and Supply Company at Smyrna, Ga., is moving its headquarters from that place to Dublin, Ga. The offices at Smyrna will be discontinued.

The plant of the American Wood Block Company has been leased by the Imperial Hoop Company at Bucyrus, O., and will be reopened for the manufacture of hoops and hub blocks.

The Walker Springs Lumber Company has been organized at Parkersburg, W. Va., to deal in timberlands and manufacture lumber. Its capital stock is \$5,000 and the incorporators are A. J. String, W. E. G. Reed, H. B. Hogg, John B. Hofmeier of Parkersburg, and W. E. Deegans of Glen Jean.

Articles of incorporation were recently filed with the secretary of state for the Madison River Lumber Company. The company is capitalized at \$30,000 and will cut and mill lumber in the upper reaches of the Madison river. Those backing the concern are T. M. Hodges, Wm. Wilcox, and J. H. Chapman.

The warehouse of the Lake Independence Lumber Company, Big Bay, Mich., was recently burned with a loss estimated at between ten and fifteen per cent of \$600,000 insurance. The plant had recently been purchased by the Brunswick-Balke-Collender Company, and over 100,000 bowling pins were burned.

At a special meeting of the creditors of the Tomb Lumber Company, Philadelphia, Pa., held recently in the office of the referee in bankruptcy, Harry P. Droney, the trustee, was given permission to sell the right, title, and interest of the bankrupt concern in its real estate and personal property to the Watoga Lumber Company for the sum of \$10,500 in cash.

The Varner Land & Lumber Company of Altheimer, Ark., has recently purchased 7,500 acres of white oak and hickory timber north of this city and is now building a new mill on the property. It will shortly move its plant now located at Altheimer to the new site and in addition install a Mershon 66-inch resaw, which will increase the capacity of the plant to about 40,000 feet daily.

The Virginia-Carolina Lumber Company, manufacturer and wholesaler of hardwoods and yellow pine, with headquarters at Lynchburg, Va., and mills in Virginia, North Carolina and South Carolina, recently filed a petition of bankruptcy with liabilities of \$89,972 and assets of \$123,996. The action was taken by the board of directors of the company in justice to all the creditors and by reason of the fact that banking facilities have not been sufficiently large to take care of the business. Richard T. Yates, president of the company, also filed a personal petition in which his liabilities are given at \$43,295 and assets at \$35,000, of which \$33,000 is stock in the Virginia-Carolina Lumber Company.

ter, N. Y., the new town site of a building operations of the company in the Adirondacks.

The new electric-power concrete fireproof box factory of the Mengel Box Company of Louisville, Ky., which has been building on the Newark Meadows, N. J., the past year is fast nearing completion. It will be one of the most modern and largest box plants in the country and exceedingly well located in the matter of water and rail receipts and shipments, adjoining as it does the main line of the Pennsylvania railroad.

The sympathy of the lumber trade of the Metropolitan district is extended to Mr. Russell J. Perrine, president of the New York Lumber Trade Association and head of Johnson Brothers, Brooklyn, in the loss of his esteemed father, Duncan K. Perrine, retired, which occurred at his residence in Brooklyn, Oct. 10.

George D. Burgess of Russe & Burgess, hardwoods, Memphis, Tenn., spent several days in town during the fortnight in the interest of business. He reports hardwood conditions strong. The mills of this company are running double shifts and the sawmills eleven to twelve hours. The company finds a ready market at satisfactory prices for all it can produce.

The Holan, Hunter, Feitner Company, wholesale specialist in cypress, Brooklyn, is just making a substantial addition to its lumber shed for the purpose of carrying more of the higher grades of cypress under cover. This house is one of the most successful in the local lumber trade and the facilities which it employs are being increasingly appreciated by the trade.

Theodore F. Dinkel, vice-president of the Dinkel & Jewell Company, large lumber and millwork house of Tarrytown, N. Y., died recently at Cornish Flats, N. H., where he had been spending the last two years on account of his health. Mr. Dinkel was widely known in the lumber trade. A host of friends mourns his loss.

W. W. Knight of the Long-Knight Lumber Company, Indianapolis, Ind., was a prominent hardwood visitor during the fortnight in the interest of National Wholesale Lumber Dealers' Association affairs.

The Frank J. Parks Lumber Company succeeds to the wholesale business of Frank J. Parks, 1 Madison avenue, Manhattan.

The local wood-working machinery trade and many members of the lumber trade of this city and the Atlantic seaboard, were grieved to learn of the death of Lloyd A. Kimball, manager of the New York office of the Simonds Manufacturing Company, large saw manufacturer of Fitchburg, Mass., and a director in several other corporations. Mr. Kimball died at his residence in Brooklyn in the sixty-first year of his age. He had not been in good health since early spring.

BUFFALO

The Sparkman Mill & Lumber Company, Little Rock, Ark., of which L. H. Allen of this city is vice-president and manager of the Buffalo office, has become a member of the Buffalo Lumber Exchange. Mr. Allen opened an office on the twelfth floor of the Prudential building several months ago and is handling yellow pine and oak in this territory.

Anthony Miller states that his yard has lately been getting plenty of cars with which to fill orders, but that the chief difficulty at present is to secure labor.

O. E. Yeager reports the hardwood trade as showing much improvement.

Charles Perrin of Blakeslee, Perrin & Darling, with his wife and a party of friends, has been making an auto tour of southern New York.

J. B. Wall has returned from a trip of several weeks through the South, looking after lumber shipments. The yard of the Buffalo Hardwood Lumber Company is getting in a good stock of oak.

R. D. McLean has returned from the South,

CHICAGO

George D. Burgess of Russe & Burgess, Inc., Memphis, Tenn., was in Chicago the early part of the week, accompanied by his wife. Mr. Burgess had been taking a short pleasure trip in Wisconsin, after which he went to the East on business, returning to Chicago en route to Memphis.

D. E. Kline of the Louisville Veneer Mills, Louisville, Ky., was in attendance last week at the meetings of two of the veneer clubs. Mr. Kline called on some of his trade while in the city and was extremely optimistic as to conditions in the veneer business.

W. E. Johns of the Johns-Mowbray-Nelson Company, Cincinnati, O., was with the local trade a few days during the week.

H. S. Janes, president, and G. I. Jones of Boston, treasurer of the New England Hardwood Company of Wilmington, Vt., stopped at HARDWOOD RECORD offices between trains en route to Memphis on Tuesday of this week.

T. J. McDonald of Knoxville, Tenn., who conducts an extensive timber cruising business at that place, spent several days last week in Chicago in connection with some big cruising work which he has on hand in the South.

C. T. Jarrell, with B. C. Jarrell & Co., Humboldt, Tenn., was one of the prominent veneer manufacturers in attendance at the recent meetings in Chicago.

Ralph May of May Brothers, Memphis, Tenn., was one of the out of town members of the Lumbermen's Club of Chicago who attended the entertainment given on the night of Oct. 12, at the club rooms. Mr. May was in the city for several days and says the condition of trade with him is highly satisfactory.

C. M. Sears of the Edward L. Davis Lumber Company of Louisville, Ky., was one of the recent prominent out of town visitors to the local trade.

John Penrod, prominent veneer and fancy wood man of Kansas City, was one of the distinguished visitors locally during the last two weeks.

S. B. Anderson of the Anderson-Tully Company, Memphis, Tenn., has been in the city for the last week in connection with the veneer meetings and also on business.

E. H. Klann, hardwood wholesaler with offices in the Fisher building, is at work again after having been confined to his home for almost two weeks with a severe illness.

M. L. Pease of the Galloway-Pease Company, Saginaw, Mich., just reached Chicago after having spent several weeks at the company's mills at Poplar Bluff, Ark. Mr. Pease states that his chief difficulty at present is in getting a sufficient amount of dry hardwood lumber to meet his orders.

J. O. W. Danielson of Danielson & Pierce, hardwood wholesalers of Rhinelander, Wis., spent a few days the latter part of the week with the local trade.

R. S. Kellogg, secretary of the Northern Hemlock and Hardwood Manufacturers' Association, spent Wednesday of this week in Chicago en route from Wausau to Detroit, where he will attend the meeting of the Michigan Hardwood Manufacturers' Association.

Harold Coppes of the Coppes, Zook & Mutschler Company, manufacturer of Indiana hardwoods, with headquarters at Nappanee, was in the city on Wednesday of this week on business in connection with that company.

C. L. Wallace has taken offices in the Peoples Gas building, this city, under the style of C. L. Wallace, agent. He will do a commission lumber business.

NEW YORK

W. L. Sykes, president of the Emporium Lumber Company, hardwood lumber operator in Pennsylvania, Vermont and the Adirondack region of New York state, recently visited Manager W. E. VanWert at the local sales office of the company.

W. C. Sykes, son of W. L. Sykes and head of the Adirondack operations of the company, was united in marriage recently to Miss Marion I. Chappell, at Syracuse, N. Y. After their honeymoon Mr. and Mrs. Sykes will reside at Coni-

where he found the mills of the McLean Lumber Company running in good shape. A feature noted by the company is stronger prices in quartered oak.

I. N. Stewart & Bro. state that oak prices have stiffened up considerably of late, especially in the buying end, and both plain and quartered are now holding very firm.

G. Elias & Bro. find the hardwood trade holding up well, with a large demand for building lumber, of which supplies are being received both by rail and by the lakes.

The National Lumber Company is selling a large amount of flooring, shipping direct from the mills. Quotations on oak, maple and birch flooring are higher and firmer than a few weeks ago.

The A. A. Engle Lumber Company is looking after shipments of hardwoods from Harriman and New River, Tenn., and President G. A. Corson is spending ten days at those two lumber points.

John Mahar, one of the most prominent men at Medina, died on the 16th. For thirty years he had been engaged in furniture manufacturing there. He was 57 years old and left three brothers and a sister.

PHILADELPHIA

The Philadelphia Wholesale Lumber Dealers' Association held its regular monthly meeting preceded by a dinner at the Union League clubhouse, Oct. 10, with President Horace A. Reeves, Jr., in the chair. As nothing of specific interest was on the boards, after transacting the routine business, the evening was devoted to a social business talk.

John W. Coles says business is running without serious hitch. Inquiries are increasing and orders are piling up. The car shortage which interferes considerably with shipping, is always an incidental obstacle.

James H. Campbell of Currie & Campbell reports steady trading. The mill at Berner, W. Va., is working full capacity getting out orders. William N. Lawton of the yellow pine department says that the principal difficulty now is to get the goods to fill orders.

Justin Peters, manager of the Pennsylvania Lumbermen's Mutual Fire Insurance Company, speaks complacently of conditions. Business continues as prosperous as when the semi-annual statement was made to the stockholders in July last, and from present indications the company bids fair to write more new business in 1912 than ever before in its history.

W. R. Taylor of the W. R. Taylor Lumber Company recently purchased the interest in the company of Otto Cluss, former secretary and treasurer. The present officers are W. R. Taylor, president; M. C. Taylor, secretary and treasurer. W. R. Taylor, who recently returned from a tour of New York and eastern Pennsylvania, reports business brightening up all along the line. Hardwood selling is easy providing prompt delivery of goods can be made. Roland Perry, formerly of Mann & Parker, Baltimore, Md., has been secured as salesman, to cover New York and northern New Jersey.

Thomas E. Coale of the Thomas E. Coale Lumber Company says business has never been better. Both Pittsburgh and local offices are rushed with orders, with satisfactory prices.

T. Deland Williams of J. Randall Williams & Co. has just returned from an extensive tour of the lumber camps as far down as Tennessee, looking up stock. He says business with the firm is fine, everything running smoothly and prices holding firm.

Frank R. Whiting of Whiting Lumber Company reports increased activity in every branch of its extensive business. Liberal inquiries are resulting in good business, and the outlook is distinctly favorable for fall and winter trading.

Horace A. Reeves, Jr., says he is getting good business right along, and all signs are

potent for the continuance of a sound trading throughout the winter.

Joseph P. Comegys, manager of the Barker-Bond Lumber Company, says business continues brisk, car shortage being the only hitch. The New York office reports live trading all along the line.

PITTSBURGH

The Balsley & McCracken Company is now well located on the twentieth floor of the new First National Bank building, where that veteran, I. F. Balsley, is right at home to all his hardwood acquaintances. He started business by getting in a splendid order for chestnut and will have a fine line of cypress and also good connections in all hardwood stocks.

The Acorn Lumber Company has increased its force of salesmen by putting on Ralph B. McConnell of this city to work its eastern trade. H. W. Henninger of this company has lately been touring the West Virginia mills.

George L. Camp, manager of the Camp Manufacturing Company's Pittsburgh office, reports business strictly O. K. He took one order for over 200,000 feet last week and is well satisfied with prices received.

The Mutual Lumber Company, a new concern, is doing business right off the reel from its fine quarters in the First National Bank building.

W. W. Wilson, Jr., president of the Western Lumber Company, recently made a long trip through the Northwest in search of stocks.

The A. M. Kinney Lumber Company is starting another hardwood mill, which makes six it is now running in western Pennsylvania and eastern Ohio cutting oak and hardwood. Mr. Kinney and D. F. Dickson of this company spent two weeks hunting in Erie county, Pennsylvania, recently.

The McKeesport Planing Mill Company has been organized by A. W. Evans, Leonard S. Jones and others of that city, and has applied for a Pennsylvania charter.

The A. A. Engle Lumber Company of Buffalo has bought about 3,000 acres of timberland in the Ligonier valley of Pennsylvania for \$52,000. It will cut off the timber and market the lumber at once.

Joseph T. Reininger and M. L. Reimann of this city have bought from Somerset county parties several large tracts of timberland and propose to cut them off shortly.

The Green & Evans Company sold its lumber yard at Swissvale, Pa., to Harry E. William J. and Clarence McBride of Rankin, Pa. Hereafter it will be known as the Swissvale Lumber Company.

E. V. Babcock of the Babcock Lumber Company was last week elected vice-president of the Columbia National Bank of Pittsburgh, of which he has been a director for a long time.

The Meyers-Parsons Lumber Company reports it very hard to get shipments through. Yards are still furnishing a good lot of orders and as a rule wholesalers can name their own prices.

The Kendall Lumber Company has bought 20,000 acres of coal and timberland in Preston and Monongalia counties, West Virginia. It will operate a mill with a capacity of 50,000 feet daily and will also have two coal mines that will produce 500 tons per day each.

BOSTON

Arthur M. Moore of W. E. Litchfield, Boston, and assistant secretary and treasurer of the Massachusetts Wholesale Lumber Association, has returned from a trip to Washington.

The Merrill Chair & Manufacturing Company, Boston, Mass., and Stoddard, N. H., has been incorporated with a capital stock of \$200,000. The incorporators are Andrew Case, Henry R. French and Charles H. Merrill.

The John H. Bryant Lumber Company, Jef-

erson, Mass., has been organized with a capital stock of \$10,000. The incorporators are Moses Erskine of South Jefferson and John H. Bryant of Everett, Mass.

The Neuvo Mahogany Company, Hartford, Conn., has recently filed a final certificate of dissolution.

The business of the late Harry E. Baker is being liquidated. Mr. Baker was killed a few weeks ago in an automobile accident. He was well known in the Boston lumber trade, being organizer of the H. E. Baker Company.

BALTIMORE

Fire of unknown origin recently resulted in the destruction of the lumber yard of George Helfrich & Sons, Columbia avenue and Bayard streets. The loss is estimated at more than \$40,000, partly covered by insurance.

Thirty-one mahogany logs were among the cargo of the steamer Ulstermore which arrived here recently from Liverpool. The logs were consigned to the Williamson Veneer Company of Highlandtown, a suburb of Baltimore, and will be cut up into veneer. They came from Africa, being transshipped at Liverpool, and are of fine grain. The Williamson company has been making a number of such importations.

The Pioneer Hardwood Flooring Company, recently organized, began operations at its plant on President and Fleet streets, Oct. 6. The company will turn out oak flooring exclusively. All of the machinery will be electrically driven. The president of the company is Walter T. Startzman, vice-president and treasurer, John Ryan, and secretary, Felipe A. Broadbent, who is also president of the Felipe A. Broadbent Mantel Company.

The Champion Lumber Company, which some time ago purchased the timber and other assets of the Pigeon River Lumber Company along the Pigeon river in North Carolina, is constructing a mill at Sunburst, on the tract. The plant will have a capacity of about 125,000 feet per day, and will be equipped with all modern facilities. It will be connected by railroad with Canton, N. C., and with other points later on. It is expected operations will be commenced in a short time.

Richard P. Baer & Co. have moved their office from the Keyser building, Calvert and German streets, to the tower of the Maryland Casualty Company, Baltimore street and Guilford avenue, where they occupy the eleventh floor. The new location gives them more than twice the space of the old offices, and various additional conveniences. The suite of rooms has been equipped with entirely new furniture, and every device calculated to facilitate the work of the office force is being installed.

J. E. Morgan, president of the Morgan Company, of Oshkosh, was a recent visitor in Baltimore.

S. Robb Eccles, a popular lumberman of this city, has been named as viceregent snark of the Concatenated Order of Hoo-Hoo for another year. Mr. Eccles is planning to hold a concatenation about the time of the annual meeting of the Baltimore Lumber Exchange, the first week in December.

COLUMBUS

The Imperial Lumber Company of Columbus, O., has purchased the plant of the Butler Furniture and Equipment Company of Butler, O.

Owing to heavy traffic demands on the Toledo & Ohio Central Railway, orders have been issued to increase the switching facilities between Columbus and Toledo. This is being done in order to avoid congestion. All the switching facilities between the two cities will be enlarged to accommodate at least eighty cars.

Joseph Ramsey, Jr., formerly with the Wash Railroad Company, has opened another

railroad connection in Ohio and is now president of the Lorain, Ashland & Southern Railway Company, which runs from Lorain to Wellington and stops several miles south of Ashland. He plans to connect the line with the Pennsylvania and to penetrate certain points that are not touched by any other railroad company.

Energetic efforts are being made by the Ohio Public Service Commission to minimize the present car shortage and to prevent congestions at various transfer and terminal points throughout the state. A number of traffic officials, representing several of the leading railroad systems having offices here, were before the commission recently and questioned. From the reports obtained it was indicated that an actual car famine may develop in the state.

Judge Dillon has appointed H. S. Buskirk as receiver of the General Lumber Company, with offices in the Hartman building, upon the application of its president, Harry Putnam, who claims he is the largest stockholder in the concern and says the company's assets are being dissipated. He says two promissory notes for \$5,000 each, which were due Oct. 1, are unpaid. Mr. Buskirk, the receiver, gave bond for \$10,000.

The announcement is made that the firm of Powell & Rowe, located at 81 North Nelson road, has been dissolved. H. M. Rowe, junior member of the firm, has gone to Dayton where he has opened an office in the name of the H. M. Rowe Company. The business in Columbus will be continued in the same place by F. Everson Powell under the name of the Powell Lumber Company. Mr. Powell reports a good demand for hardwoods with prices ruling firm. He looks for a good business throughout the winter.

In a suit filed by Alex Brunner against W. K. Noble of Tiffin, O., application was made for the appointment of a receiver for the Tiffin Hoop Company. It is claimed that it is to the interest of all parties to keep the concern in repair and operation.

R. W. Horton of the W. M. Ritter Lumber Company, says the demand for hardwoods is good with the lower grades moving especially strong. Prices are ruling firm and the volume of business is all that could be expected for the time of the year. Both manufacturers and retailers are buying well, but the car shortage is becoming serious.

L. B. Schneider of John R. Gobey & Co., says hardwoods are in good demand, the only drawback to the active trade being the growing car shortage. He says prices are ruling firm and are inclined to advance.

George Malloch, sales manager for Bliss & Van Auken, Saginaw, Mich., was a recent visitor in Columbus.

W. L. Whitacre of the Whitacre Lumber Company says the demand for hardwoods is strong and prices are ruling firm.

INDIANAPOLIS

North, Frazier & Co., Portland, recently suffered a \$2,000 loss by fire in their planing mill.

H. M. Campbell, P. G. Cook and J. D. Wetz have organized the Greenfield Wood Turning Company, to manufacture handles, novelties, etc. The company has been incorporated with an authorized capitalization of \$10,000.

A new plant is being erected by the Wabash Veneer Company at Adams street and Massachusetts avenue.

Thomas W. Stewart, secretary and treasurer of the Eaglesfield-Stewart Company, manufacturer of hardwood flooring, and a heavy stockholder in the old Eaglesfield Lumber Company, died at his home in this city on Oct. 11. He had been ill two weeks from bronchial pneumonia. Mr. Stewart was seventy-seven years old and was born in Oneida, N. Y., coming to this city in 1859. The funeral was held from the family residence in the Blacherne and burial

was in Crown Hill cemetery. The widow and two daughters, Mrs. Addison Braum of Kansas City, Mo., and Mrs. Charles A. Burnett of Lafayette, Mo., survive.

EVANSVILLE

Weaver Haas of the W. E. Heyser Lumber Company, Cincinnati, O., visited the mills in the city recently.

Claude Maley of Maley & Wertz, Evansville, and Charles Maley of the Maley Hardwood Lumber Company, Yazoo City, Miss., have returned from Lexington, Ky., where they attended the races. F. M. Cutsinger of Young & Cutsinger returned early last week.

The case of Young & Cutsinger vs. the Louisville & Nashville Railroad Company is set for a hearing before Commissioner McVord of the Interstate Commerce Commission, on Nov. 4. The complaint is for refund on milling in transit shipments where the lumber was shipped from milling point more than six months from date logs were shipped to milling point, the tariff restricting the time to six months. The tariff was, afterward reissued with a limit of one year.

H. J. Schaefer of Young & Cutsinger, Jackson, Tenn., was in the city last week. Mr. Schaefer reports things moving nicely at his plant and says he has a lot of fine white oak logs that will make quartered oak of which his firm makes a specialty.

The plant of the Jackson Lumber Company, Jackson, Tenn., was destroyed by fire recently. The veneer sheds and dry kiln were a total loss. The fire did not reach the sawmill. The Jackson Lumber Company is affiliated with the Evansville Veneer Works.

MEMPHIS

Local manufacturers of hardwood lumber are having considerable difficulty in securing enough cars with which to bring timber to Memphis. This is handicapping them to some extent in the operation of their plants because the stock of logs on hand is not large. It is also a source of anxiety to them because the timber must be sawn into lumber to prevent worm damage or deterioration from other causes. It is stated that the amount of timber on the right of way of the Yazoo & Mississippi Valley road is unusually large; it is likewise true that there is a very large amount of timber along the right of way of other roads South and West. A prominent manufacturer, who does not by any means operate the most extensive hardwood plant in this city, said recently that he had more than 2,000,000 feet of timber awaiting transportation to Memphis. Others say that they have a great deal of timber awaiting transportation and the difficulty in securing cars is the most serious handicap under which they labor.

At a conference held here last week between about thirty leading representatives of the hardwood manufacturing industry and the traffic officials of the Illinois Central Railroad Company, lumbermen made a very strenuous protest against the lack of cars and appealed for relief. The representatives of the railroad promised to do everything they could to relieve the situation. While practically every firm here is having more or less difficulty in securing enough cars with which to make shipments of lumber, conditions at Memphis are more favorable than at a number of the smaller points in the Memphis territory.

Although there have been no further special developments in the export movement of hardwood lumber, there is a serious handicap in the fact that the Illinois Central Railroad Company is requiring that freight room be engaged at New Orleans before bills of lading will be issued on export shipments. A prominent exporter

said recently that when this firm had lumber to ship to Europe it was making application to the commercial agent of the Illinois Central, and that through bills of lading were issued only in case the freight room was engaged. He stated, however, that this required more than a week, which necessarily entailed a great deal of delay. In cases where exporters are unable to secure freight room at a given date from New Orleans, the Illinois Central as well as some of the other roads are refusing to issue through bills in order that they may prevent a recurrence of such congestion as was witnessed in New Orleans last winter.

Indications are that the Lumbermen's Traffic Bureau will have much work to do this winter. The railroads are making preparations to advance hardwood rates to a point where they will be equal to the rates on yellow pine and then to advance the rates on both one cent additional. An advance is also announced as pending on shipments of hardwood lumber from Memphis to New Orleans. This was put into effect some years ago and was paid by lumber shippers for about two years, when it was ordered cancelled by the Interstate Commerce Commission, which ruled at the time that the advance was unjust and the new rates unreasonable. It remains to be seen what the decision of that body will be at present. There is also an advance to Canadian points on the cards, and the Traffic Bureau will have to handle this also. J. H. Townsend is in charge of the Lumbermen's Traffic Bureau. The Washington end of the hearing, however, will be in the hands of John H. Walker. The lumbermen do not believe that further advances in hardwood rates at this time are justified, and whatever may be the outcome, it is certain that a strenuous effort will be made to have the commission set aside the advances which have been proposed as well as the equalization of hardwood and yellow pine rates.

The exhibit of red gum by the Memphis Manufacturers' Association has been completed and makes a most creditable showing. In addition to red gum, which is shown in almost every style, there are a number of products made therefrom, including high class furniture. It is expected that the exhibit, which is intended to illustrate the beauty and utility of red gum, will prove of decided value from an educational standpoint.

The material enlarging of their yards in North Memphis will enable James E. Stark & Co. to take care of several times as much lumber as under the old régime. The yards are being graded and the necessary roadways are being constructed. This firm is engaged entirely in the wholesale handling of hardwood lumber.

Definite announcement is made that the shops of the Missouri & North Arkansas Railroad Company will be located at Harrison, Ark., and that at least \$200,000 will be spent in equipping.

The W. T. Peter Lumber Company, Madison county, Tennessee, has been incorporated, with a capital stock of \$30,000. W. T. Peter, W. F. Lamb and others are the incorporators.

M. C. Bunn has succeeded T. E. Griffin as general manager of the Southern Lumber & Manufacturing Company at Jackson, Miss. The company, under the new régime, expects to increase its output materially. The plant has not been operated steadily for some time.

W. L. Crenshaw, who sold out his interest in the Bellgrade Lumber Company some months ago, is spending a considerable portion of his time at his sawmill near George, Miss., in order that the plant may be placed in readiness for operation. Mr. Crenshaw has been prominently identified with the hardwood lumber business at Memphis for a number of years, first as a member of the firm of Crenshaw & Cathey, and later as president of the Bellgrade Lumber Company. He is also one of the officers of the Memphis Hardwood Flooring Company.

The Greble-Sine Lumber Company has made arrangements to handle the cut of several mills in Arkansas and Mississippi. W. H. Greble has been personally looking after these arrangements. The company is securing a very nice run of orders.

Advices received here from Paragould, Ark., are to the effect that the movement of timber in that section is the heaviest on record. One day recently there were 119 cars of heading and stave bolts on the tracks of the Iron Mountain there, besides a large number on the tracks of the Cotton Belt line. Owing to the fact that many of the factories at that point were unable to accommodate all the timber which was deliverable to them, it became necessary for the railroad companies to unload considerable timber on their right of way.

George D. Burgess of Russe & Burgess, Inc., has returned from an extended vacation trip which carried him to Chicago, New York, Boston, Philadelphia, Atlantic City and other points of interest. He was accompanied by Mrs. Burgess.

W. N. Wright of the Wright-Bachman Lumber Company, Portland, Ark., has been spending considerable time in Memphis recently. His firm has cut all of its timber on its tract of land near Portland and has suspended operations. It has sold the greater portion of this lumber but still has some to offer and is busy making deliveries on sales already effected.

Among the prominent visitors to Memphis during the past few days has been J. B. Wall of the Buffalo Hardwood Lumber Company, Buffalo, N. Y.

NASHVILLE

There is great interest in this state in forest conservation, this being one of the most important hardwood sections of the country. The Southern Commercial Congress, which met in Nashville last spring, appointed a committee to take steps looking to the formation of a commission to secure uniform and efficient legislation. J. H. Baird has been appointed chairman for Tennessee. At the January meeting of the legislature the Tennessee sub-committee will endeavor to secure a law creating a forestry commission, acquire land and put into operation an object lesson of the most scientific methods for the conservation of existing timber and encouragement of new forest growth.

J. W. Alford & Co., wholesale hardwood lumber dealers, have moved their yards and offices from Jackson street and First avenue to Michigan avenue, and in the new location will have larger yards and better shipping facilities.

The Nashville Lumbermen's Club is making determined efforts to secure the 1913 convention of the National Wholesale Lumber Dealers' Association. A committee consisting of Chas. M. Morford, chairman; T. B. Johnson, Olin White and J. H. Baird, has been appointed to press the matter before the executive committee of the association, and emphasize the cordial invitation issued, as well as to give assurance of co-operation of every member of the local club to make the convention a success.

The Nashville Lumbermen's Club has received notice from the Interstate Commerce Commission that there will be a meeting of the general investigation of weights being conducted by the commission at Memphis, Dec. 13 and 14. President Hamilton Love was authorized to appoint three men to represent the local club at the hearing, and other members will probably attend. The case involves the matter of over weights on car lots of lumber.

E. N. Ralston, secretary of the Ransom Hardwood Lumber Company, Hope, Ark., was a recent visitor in Nashville. Mr. Ralston's company is controlled by John B. Ransom & Co., this city. He reported important progress in the business in Arkansas.

W. A. McLean of the Wood-Mosaic Company, Louisville, made some important purchases for his company while in Nashville recently.

BRISTOL

A largely attended meeting of the creditors of the J. A. Wilkinson Lumber Company, Inc., and J. A. Wilkinson, was held in Bristol last week at the office of Referee in Bankruptcy H. H. Shelton. Mr. Wilkinson's second examination consumed two days and was largely with reference to business transactions with his several brothers and his wife, within a few months before his bankruptcy petitions. It was brought out that he paid his brothers about \$20,000; gave one of them a second mortgage on his large home in Bristol for \$7,500 and paid his wife certain sums of money during this period and that he paid only one other creditor. It was shown that he had given his wife property at Bluefield, W. Va., worth \$8,000 and had paid her money. The creditors are endeavoring to have these transfers nullified. Creditors of the corporation are contesting the \$53,000 claim against the J. A. Wilkinson Lumber Company, Inc., of Price and Pierce, Ltd., of London, contending that it is an obligation of J. A. Wilkinson. The same is true of an \$8,000 claim of the First National Bank of Bristol. Trustee Irving Whaley is getting the assets of the corporation in shape to be sold. They are appreciated at about \$50,000.

Some of the large mills in this section report that their log supply is running short. However, most of them are operating and expect to get in as much time as possible before the advent of the rough weather that makes operation very difficult. The same is true of the smaller mills which are much more dependent upon fair weather. The roads are now in only fair condition and consequently there is not as much hauling as there has been during the past few weeks.

The Tyro River Development Company is installing a new mill in Nelson county, Virginia, where it has purchased a tract of timber.

Work has been begun on the Black Mountain railway, in western North Carolina, which is being built to open up a new area of valuable hardwood timberland.

The band mill of the Peter-McCain Lumber Company is running regularly. The company is getting many fine logs from its timberland in the Holston mountains, twelve miles east of Bristol, and within the next year will cross into Carter county, Tennessee, where it recently paid \$50,000 for a new tract of timber.

Investigators representing the forestry department at Washington were here this week, accompanied by Congressman Sam R. Sells, in regard to timberlands in east Tennessee that are to be purchased by the government for the Appalachian Forest Reserve. Congressman Sells said that he was confident that the government would shortly make extensive purchases in Johnson county, which will be sufficient, he thinks, to justify an appropriation for a new macadamized road out of that section connecting with the highways leading to Bristol.

LOUISVILLE

J. E. Barton, the new state forester of Kentucky, who spoke at a recent meeting of the Louisville Hardwood Club, has been elected an honorary member of the organization. He is one of the few men outside the lumber business who have been so honored. As the state will establish a nursery in Louisville, Mr. Barton will probably have an opportunity to meet with the club frequently. The organization will have its annual meeting on Nov. 5. Edward L. Davis of the E. L. Davis Lumber Company, is regarded as a likely candidate for the presidency.

The Rotary Club of Louisville is a rather

unique organization, being one of a number of similar bodies scattered over the country. Its unusual feature is that only one representative from each business may be a member. The lumber and allied trades are well represented, however, among those elected recently being Edward L. Davis of the Edward L. Davis Lumber Company; S. E. Booker of the Booker Box Company; D. E. Kline of the Louisville Veneer Mills; Frank B. Russell, a leading stave manufacturer, and Alfred Struck, an interior finish man. G. D. Crain, Jr., secretary of the Hardwood Club, is also a member.

In view of the brisk demand for mahogany continuing, and the supply of African logs in the Liverpool market being unusually small, local mills are continuing to run day and night. The demand for mahogany veneers, which has been rather slow, has shown improvement, and this branch of the trade is now looking up. The effect of the mahogany boom has been to stimulate the demand for quartered oak, and also to help the status of Mexican mahogany.

Friends of Col. Clarence R. Mengel, president of the C. C. Mengel & Bro. Company, have congratulated him upon the fine recovery made by his son, Clarence R. Mengel, Jr., who was recently operated on for appendicitis.

One of the worst blows ever received by Mart Brown of the W. P. Brown & Sons Lumber Company, was the defeat of the Giants by the Boston Red Sox in the world's series. Always an ardent Giant fan, Mr. Brown was especially fond of Mathewson, and when Matty was beaten in the final game of the great series, Mr. Brown suffered almost as much as the big twirler.

C. M. Sears of the Edward L. Davis Lumber Company, who has returned from a trip to trade centers in the Middle West, reports an improved demand from the furniture factories.

R. Carnahan, the local timberman, is among those who have secured control of the Kentucky River Timber & Coal Company, which will develop 40,000 acres of timberland in Harlan, Leslie and Clay counties. The property will be opened for development in the near future.

ST. LOUIS

Thomas E. Powe, president of the Thomas E. Powe Lumber Company, accompanied by Mrs. Powe and their little daughter, left last week for Cheraw, S. C., on a visit to his parents. They will be absent for about two weeks. Mr. Powe, previous to his departure, stated that there was a good demand for ash, in fact his house is receiving about all the orders for this wood that it can take care of. Cypress conditions also are improving and orders are coming in nicely for this item.

W. W. Dings, secretary of the Garetson-Greaseon Lumber Co., states that the only thing that bothers his company is the car shortage. There does not seem to be any likelihood of a betterment in the situation. The company is getting only about ten per cent of the number of cars it requires at the mills. Mr. Garetson, who has been absent on the Pacific coast for the past three months, has arrived home from his trip.

E. W. Blumer, sales manager of the Lothman Cypress Company, has gone East on a selling trip. He will visit Pittsburgh, Cleveland, Buffalo and other large cities before returning home. Previous to leaving, Mr. Lothman said that the trade in cypress is splendid. Orders were coming in in good numbers and prices were satisfactory. The Lothman Cypress Company is well provided with stock and therefore is able to take care of all orders coming in. Mr. Blumer said that a great deal of business was coming to this market which generally goes to other points and since the fact that stocks are large here is pretty well known to the trade, dealers wanting cypress are looking to this market for their supplies.

E. W. Luehrmann of the Chas. F. Luehrmann

Hardwood Lumber Company reports that the company is quite busy, and nearly every item on the hardwood list is being called for. The company was very fortunate in having a good stock of everything on hand before the acute stage of the car shortage came so that it has little difficulty in filling orders.

A fairly good volume of business is reported by George Cottrill of the American Hardwood Lumber Company. He feels very much encouraged over the present situation and with the outlook for the future. Shipments from the local yards are going out all right and owing to the good sized and well assorted stocks carried the company is not bothered by the car shortage.

A luncheon was given at the City club by the Lumbermen's Exchange of St. Louis on Oct. 8, at which the improvement of the inspection of lumber was gone over and plans formulated for a continued improvement. It was decided at the meeting to hold monthly luncheons on the third Tuesday of every month, where affairs of the exchange could be discussed. Resolutions on the death of Christian F. Leibke were presented and adopted.

MILWAUKEE

The Western Parlor Frame Company has been incorporated with a capital of \$25,000 in Plymouth by George C. Maas, August Albrecht and Henry Clemens. The company will operate the former Peter Wolf plant at Plymouth.

The Tomahawk Box Company recently suffered the total loss of its plant at Tomahawk, by fire, which caused a damage of \$40,000. The insurance covers about \$30,000 of the loss.

The Plymouth Veneer Company of Plymouth has filed a voluntary petition of bankruptcy, giving its liabilities as \$58,501.84 and its assets as \$63,704.11.

The ownership of the Hankwitz Broom Handle Company of Merrill has been acquired by Clifton R. Lee of Lincoln, Neb. After an inventory has been taken, the plant will continue to run as heretofore.

The first steps to establish a course for forest rangers at the University of Wisconsin have been taken with the appointment of Frank B. Moody, assistant state forester of Wisconsin, to the position of assistant professor of forestry at that institution.

Improvements to the plant of the Northwestern Manufacturing Company's plant at Fort Atkinson, are being made at the present time. A fourth story to the chair shop is being erected, also a new dry-kiln. The individual motor system is being installed throughout the plant.

Mayor Robert Connor of Marshfield, has just returned from an extended trip through Laona and Crandon with a report of continued activities in the lumber circles and increased demand

from all sources. The Roddis Lumber and Veneer Company of the same city is installing another \$4,000 dove-tail machine in its plant, which is running full swing.

DETROIT

Never before in the history of the city has the hardwood flooring trade been in such a booming condition as it is at the present time. Although working overtime the mills are away behind orders which continue to pour in from all sections of the country.

"For the first time in the history of this company, over forty years, we are now running a ten-hour day," said John Lodge, secretary of the Dwight Lumber Company, to a HARDWOOD RECORD correspondent. "At that we are from thirty to sixty days behind on orders, the demand for our special brand of thin flooring being such that we cannot keep up to it. The increase of from two to six dollars a thousand on rough stock has compelled us to increase the price of our finished product; but, although the increase on our three-eighth and half-inch stuff has averaged two dollars a thousand, the increase hasn't affected the demand. I don't see how business could very well be much better."

Thomas Forman of the Thomas Forman Company, reports that similar conditions prevail in the flooring mill at his plant. He says that prices are very satisfactory and the volume of consumption especially good. Mr. Forman says that his company's new mill at Heidelberg, Ky., will not be ready until about Feb. 1 next year, as there has been considerable delay owing to the difficulty in securing building material. The new mill will have a capacity of about 10,000,000 feet a year.

J. M. Clifford, the largest exclusive hardwood dealer in the city, is a busy man these days. In addition to supervising his large trade he has entered politics and is the Democratic nominee for Wayne county treasurer. Regarding the hardwood market Mr. Clifford said: "Hard and soft maple has been in steady and strong demand in Detroit the past two weeks. The price is about \$2.50 a thousand higher than it was the corresponding period last year and it is bound to go still higher. White oak is also in strong demand. Other lines are normal with prices satisfactory. The automobile factories are all very busy and are big buyers of hardwoods. The market generally is in very good shape."

George I. McClure during the past two weeks moved to his new hardwood lumber yard at Clark avenue and Plumer street and has given up his office in the Chamber of Commerce building. He reports that trade has been excellent. The demand has been strong for white oak, birch and maple.

desirably high figure. Quartered oak is generally reported as showing increased firmness. Red gum, on the other hand, is not one of the strongest articles on the local market, although sap gum is being taken wherever offered, by the box manufacturers.

The consensus of opinion among the local trade is that present favorable conditions and the present range of values will not show any unfavorable change for a good many months to come.

NEW YORK

The hardwood market at New York shows a strong condition with prices well held and tending upward on good grade lumber and supplies not over plentiful at both ends of the line. The car situation is preventing prompt shipment, while holders of stock are holding out for top prices and quick shipments. Such stock as is available at shipping points appears to be in strong hands and the entire market gives evidence of continued strength for the balance of the year.

BUFFALO

The hardwood trade is improved over a month ago and customers are buying much more freely now than they did at that time. The furniture factories are all busy, but the implement concerns have begun to slow down a little. Stocks in Buffalo yards are large and much better assorted than early in the season. The favorable railroad location of this market makes the car scarcity a lesser factor here than elsewhere.

Most all hardwoods share in the activity at present, oak to a larger extent than most others. Quartered has already begun to show more strength. It is aided by the stiff prices now prevailing in mahogany, which makes the trade turn to some other wood. It is difficult to find mahogany in any quantity except at a very high price. Birch and maple are in pretty good demand and beech has picked up, being used considerably for flooring. Ash is in improved sale. Poplar has become a little more active.

PHILADELPHIA

Lumber trading has maintained a stiff activity during the last fortnight, and a robust business is anticipated for the winter months. Buying shows improvement among the wholesale consuming industries, and there is no sign of diminished requisitions on the railroad boards. The box makers continue busy, which indicates a brisk business in other lines than those of lumber users.

An optimistic feeling as to the outlook prevails everywhere, regardless of the approaching presidential election. The hardwood market stands practically the same as it did a fortnight ago. Oak is the leader; red and white oak is scarce, with prices climbing; ash is making a stride forward; chestnut is in strong demand, especially in one inch No. 3 common; sound wormy chestnut keeps a good reputation; there are many calls for cherry, birch and beech, and prices hold firm. Poplar remains steady, with strong activity in low grades; hickory has numerous inquiries; cypress is more quiet, and a more vigorous trading is noticeable in mahogany and veneer.

PITTSBURGH

Hardwood lumbermen are feeling about forty per cent better than at this time last year. Things have been coming their way the past six months. It begins to put a little of the old-time spirit in their conversation and everybody is on the hopeful toboggan. Prices are O. K. Stocks are low and hard to locate where strictly

The Hardwood Market

CHICAGO

Representatives of out of town firms continue to be notably scarce in the local market. Reports from leading manufacturers and wholesalers in other hardwood centers indicate that in a great many cases salesmen are still off the road and are circulating among mills in an endeavor to locate sufficient dry stock to fill immediate demands.

A few members of the local trade state that there is still a tendency among some of the buyers to regard the present strength of hardwood values as temporary and that in some cases such buyers have expressed themselves as

believing that a few months will see a slump in hardwood prices. However, this idea is not prevalent and the majority of bigger buyers in the city are doing all they can to secure sufficient hardwood stock at present prices rather than run the risk of paying higher figures at a later date.

Building operations continue to be active, while the same can be said of flooring factories, piano factories, furniture houses and box manufacturers.

Plain oak is bringing prices that in some cases rather stagger buyers in view of the easy market which they have been enjoying for several years. However, it can be said that oak still can go some distance before reaching an un-

fine lumber is wanted. This is particularly true of white oak.

The furniture manufacturers are making heavy call upon wholesalers for good stock and every bit of lumber of this kind is being grabbed up quickly and paid for with a vengeance. Purchasing agents are taking no chance on leaving their plants exposed to a shortage of consuming lumber this winter, and are making hard efforts to overcome the car shortage by getting in enough orders to assure their employers of plenty of material until spring. The yard trade has been good but easing off a little as the inventory season approaches. Mixed hardwood has been a big factor with the coal mining industry and is likely to continue so for a long time.

BOSTON

Opinions differ somewhat as to the condition of the hardwood market in Boston. Some dealers state they are in receipt of a good volume of business while others claim they have not been doing as much as they should. Although the shortage of cars is still a serious problem, the average buyer has not been willing to anticipate his wants in any way. Some large buyers in this section who placed orders some months ago, calling for from two to six cars of lumber a month, have not been willing to take in more than one-half of the lumber they contracted for. While this condition is found, it is also true that some buyers are asking for larger lots than they had previously placed orders for.

Generally speaking, furniture manufacturers are not busy, although a few of the plants are working full. The piano manufacturers in this section appear to be running full. They have been fair buyers of lumber. All reports from manufacturing centers indicate a small supply of hardwood lumber. Holders are not anxious sellers and insist upon asking prices. The offerings of plain oak are light and the demand has ruled rather active of late. In some cases for ones and twos, one inch, as much as sixty dollars is being asked, but buyers are not willing to pay this price with any freedom. Quartered oak is firm with a very fair demand. A fair demand is noted for both brown and white ash. Some manufacturers are asking slight advances but buyers do not appear willing to pay a higher price.

BALTIMORE

None of the favorable conditions that have developed in the hardwood trade in recent months is in the slightest degree modified. On the contrary, all the advantages gained are being maintained, and there are indications that the improvement will become even more pronounced, for the headway scored of late was made in the face of relatively small requirements, while the next few months are certain to bring out calls to meet the wants of the spring trade, when even greater activity may be looked for. The movement might be larger still but for the fact that high freight rates and other circumstances compel the millmen to adjust the quotations upon a new basis, which causes some of the intending buyers to hold off in the expectation that they may be able to get better terms. The millmen, on the other hand, express the fullest confidence in the future, contending that the range of values is likely to be higher than it is at present, and that the dealers are making a mistake when they wait. Oak and other woods in general use are in brisk demand. Even the lower grades of chestnut are sought and the distribution is rapid enough to dispose of the output of mills without the slightest difficulty.

With regard to the exports, the preponderance of opinion is favorable. Shippers report that they are getting many orders and that the current figures are such as to encourage shipments. The heavy forwardings to some of the foreign

ports due to a raising of the freight embargo, caused a slight easing off for a time, but the quotations have worked back to the former figures. What continues to trouble the exporters is the rise in the foreign freight rates. The advance cannot be absorbed by the shippers and must be borne by the buyers. The latter, of course, object to paying the advance, and there is some holding off, but the increasing requirements are forcing this element into the market, and there is every reason to expect that a good business will be done. Inability of the exporters to make contracts with the steamship companies for the next year tends to augment the uncertainty and has its share in retarding the movement, but this question must be settled before long, and as there is every prospect that the range of values in the domestic market will remain high and the demand free, the foreign buyers must come to terms or do without American hardwoods.

COLUMBUS

Activity in every variety and grade of hardwood still prevails in central Ohio, while the demand is good both from manufacturing establishments and retailers. Considerable inconvenience is caused by the lack of cars, and lumbermen believe there is little or no hope for an improvement in the situation. The pleasant weather which has prevailed for the fall has aided building operations, and as a result there is considerable activity in that line, which creates a good demand for many varieties of hardwoods. Manufacturers engaged in making furniture, implements and vehicles are in the market for larger stocks. Dry stocks in every locality are short and the outlook for the future is good.

The demand for the lower grades is good and sound wormy chestnut is especially strong. There is also a good demand for the lower grades of oak and basswood. Automobile factories are now buying the wide sizes of poplar for bodies. Quartered oak is in good demand and prices are fair. There is a very good demand for plain oak, both white and red, and firsts and seconds are quoted at the Ohio river at about \$52. Chestnut is one of the strongest points in the market. Basswood is moving well in all grades. The demand for ash is better and prices are firmer. Poplar is becoming better with the result that accumulated stocks are being exhausted. Other hardwoods are unchanged.

TOLEDO

The hardwood situation has not changed materially during the past month. Prices remain high with an upward tendency but dealers, although compelled to use up their yard stock more closely than is generally considered expedient, steadfastly refuse to buy more than is necessary for present needs, holding fast to the belief that prices will drop. Local yards are shorter than usual owing to this hand-to-mouth policy and the extremely heavy drafts that have been made upon their resources, but are still able to take care of orders in fair shape. The car shortage is being severely felt by local lumbermen, shipments coming in slowly not only from the South but from all points, even in local territory.

Toledo is still maintaining its good record of the summer in the building line and, regardless of the lateness of the season, new allotments are being opened and residences built. Houses are under construction in all parts of the city and some enormous investment structures are being projected which will be started this fall. The homes under construction are all of a high order and require large quantities of hardwoods.

Furniture and vehicle factories are running well and sending in good orders for hardwoods. This is also true of sash and door concerns.

Taken altogether there is little cause for complaint among local hardwood dealers.

INDIANAPOLIS

Trading has been active in the local hardwood market during the last two weeks, but there has been some delay in shipments and receipts owing to car shortage. The car situation is becoming acute, although the railways appear to be trying to keep cars moving promptly and to obtain as much efficiency as possible from each car.

Hardwood prices are stiff, particularly poplar and all grades of oak. Practically all lines are in fair demand. There is a good demand for hardwoods and veneers for interior finish, the building season being quite active owing to the excellent weather prevailing.

MEMPHIS

The hardwood market continues in a healthy position. Manufacturing operations have been on a somewhat elaborate scale during the past few weeks but the large amount of lumber shipped out has resulted in little or no accumulation. Consequently the market is well maintained as to prices and the tone is good. The demand is very satisfactory for the lower grades of cottonwood and gum which are being used extensively in box making as well as in other lines. The upper grades of gum, both red and sap, are in very good call and no particular difficulty has been experienced in effecting sales of the higher grades of cottonwood. Ash is in active call and prices are good. The automobile manufacturers as well as the makers of other vehicles are showing quite a preference for ash. A considerable portion of the local output is being shipped before it has had time to thoroughly dry. The quartered oak market is in satisfactory shape. Plain oak is in good demand and values are firm thereon. There is no big supply of either plain or quartered oak for sale. Activity in building circles throughout the West and Northwest as well as throughout the Central South are resulting in a good demand for cypress. The market on this lumber is in good shape. The lower grades, however, are relatively firmer than the upper. The export demand is good but the handicaps imposed upon lumber exporters by the transportation companies, including those handling freight by both rail and water, have restricted this business to some extent.

NASHVILLE

The demand for hardwoods continues good in the Nashville market, and manufacturers and shippers are kept busy taking care of the wants of their customers. The car shortage on all railroads is interfering with the inbound and outbound movement of logs and lumber. There is a good demand for the various lines of oak, the main difficulty being in securing supplies to meet demands of customers. Ash, hickory, chestnut and other hardwoods are in fair demand. Poplar is moving better. Prices are steady.

BRISTOL

Hardwood lumbermen of Bristol report trade somewhat brisk. There is a scarcity of stocks and many of the mills are oversold. It is believed that prices will now steadily advance and that much better conditions for the lumbermen are just ahead. About all the mills are running and shipments are fair. The railroads say that traffic is now heavier than it has been for several years and all are getting more transportation equipment as rapidly as possible, to avoid serious car shortages, but new equipment is

coming in slowly. It is now difficult to get an adequate supply of cars.

LOUISVILLE

Business with local hardwood concerns continues excellent, and the demand is holding up right on the eve of the national election in even better shape than had been expected. The prospect of a scarcity of material and a congestion of traffic is having more influence with the buyers of hardwoods than the question as to whether the shooting of Col. Roosevelt will swing the election in his favor. Stocks are not nearly so plethora as they were a few months ago, and items which were comparatively plentiful then are really hard to get now. The mahogany people have been shipping lumber green from the saw to consumers who demanded it as soon as it was manufactured, and while condi-

tions in the domestic hardwood trade are not that stringent, they are "tight" enough to suggest that consumers who want their lumber just so as to age, widths, etc., will have a harder time filling their wants satisfactorily than heretofore. There has been a fine call for quartered oak, which remains one of the pleasant features of the situation. The demand for quartered oak strips, which was not particularly good until a few months ago, has cleaned local concerns almost completely, and with the flooring manufacturers active strips of all kinds, both plain and quartered, have found a ready outlet. Poplar is reported to be moving actively, and cottonwood and chestnut are also good sellers at present. There is hardly a dull item on the list. Prices are satisfactory and strong.

ST. LOUIS

The hardwood market is quite active at this point, in fact it might be said to be enjoying a boom. The improvement which has been going on for some time has now reached a high point. Nearly every item on the hardwood list is being called for, especially the lower grades of oak, cottonwood, gum and poplar. This is particularly pleasing to the hardwood dealers for there is no trouble in disposing of the upper grades. With the increase in the demand, prices have gone up. The big trade in St. Louis is attributed to the car shortage in the South, which has been diverting trade to this center, where stocks are in pretty good condition and where shipments can go out without much delay. Although mills in the South report that their stocks of dry lumber are very low, mill operations are going on while the weather is pleasant. The cut is fairly large, but available dry lumber will be scarce until next spring.

NEW ORLEANS

Hardwoods, especially in the lower grades, continue strong and in good demand, and as stocks are low, good prices are obtainable. The car shortage is felt to some extent, although not as seriously as by the pine and cypress trade. Factory buying is active, particularly by the furniture manufacturers.

In the export trade the continued heavy movement indicates that the accumulation of delayed old business is greater than estimated, and the apparent progress in cleaning it up is to a considerable degree due to the fact that the cotton movement in the territory tributary to New Orleans is two or three weeks later than anticipated. Demand and possible business is abundant, and practically unlimited in the sense that it exceeds the capacity of any possible steamer service. The rush of forest products to the port in excess of the facilities for lifting them creates such a congestion in the railroad yards as to induce the roads to place restrictions on the movement from the interior. The result is that shippers are compelled to take orders and rely upon their ability to get them forward, and in many cases disappoint their customers.

The outlook for the hardwood log business is even more discouraging as that traffic is even less tempting to the steamers than lumber, and the favorable business abroad which is in sight has its logical time of shipment just at the time when the cotton movement is in full swing.

MILWAUKEE

The scarcity of stocks and the shortage of cars are causing considerable concern in the local hardwood trade at the present time. Business is entirely satisfactory, but prompt delivery on orders seems to be next to impossible. Wholesale lumbermen say that stocks on hand at the northern mills are unusually light, while

it seems that dry stocks at the local manufacturing plants and in dealers' hands are at a low stage. Prices are holding firm and in some instances are higher.

Fall building operations are fully up to expectations and as a result the local sash and door concerns and interior finishing plants are busy. Much fall building is going on in the country districts, now that farmers are nearly over with their rush of fall work, and dealers are placing good orders for stocks. The local furniture concerns are doing a fine business and are placing some good orders. General industrial conditions in Milwaukee have been showing considerable improvement recently and this is resulting in a better factory trade.

Birch is in good demand and is moving freely, but stocks are decidedly low. Maple is active and is holding firm. Stocks of southern hardwoods are hard to get, although demand is brisk for plain red oak and quarter-sawn white oak.

DETROIT

The local hardwood market is in very good condition. Dealers report a very fair volume of business with satisfactory prices prevailing. The demand for hard and soft maple continues, with indications in favor of a further increase in price. There is also a healthy demand for white oak while birch is also moving more freely. The automobile factories, large buyers of hardwoods, are busy and this prosperity is shared by the dealers. One of the big features of the market is the boom existing in the flooring trade. The big mills are working overtime, but are unable to catch up to orders. Prices on hardwood flooring have advanced an average of two dollars a thousand, owing to a corresponding boost in the price of rough stock. The increased price of the finished product, however, has not diminished the flood of orders.

LIVERPOOL

Business keeps wonderfully good and prices are still advancing. Stocks are moving promptly and several of the yards have never before been seen quite as empty as at the present time. The mahogany position is exceedingly firm—quite the firmest spot—and there is every sign that even higher figures will be attained at the next auction sales. The question asked by almost every one is "How much longer will these advances go on?" The consensus of opinion among the leading lumbermen seems to be that they will keep on at least all of next year. So much depends upon the freight charges and as most of the shipping companies are booked far in advance for all their available freight room, there does not seem to be any prospect of an early fall.

Round ash logs are exceedingly firm; the second growth logs are fairly well stocked, and all logs are being promptly sold at good values. First growth logs are practically non-existent in first hands; only a few logs of wormy wood are being offered, and even this stock is selling remarkably well. Some large orders for ash lumber are being placed, 1½", 2" and 3" being the thicknesses most in favor.

Very few logs of round hickory are on the market but good values are realized on whatever is offered. Birch is good, though a fair stock of Halifax wood is on hand. Prices are exceedingly firm. Pitch pine is being sold at almost incredible figures and the market is practically without any stock of prime quality.

Round oak logs are being sold in large quantities, especially if really white in color. The market for quartered oak lumber also seems good and prices are exceedingly firm. Dimension oak is coming forward better, though the orders are very old ones. Wagon specifications are wanted very badly and buyers are anxiously awaiting shipments.

LUMBER WANTED

4/4 & 5/4 No. 3 and 4 Com. Poplar.
4/4 No. 3 Basswood.
4/4 No. 3 Chestnut.

P. T. Baker & Son
1212 W. Liberty St. Cincinnati, O.

FOR SALE

First Class Factory Building

Floor space, 10,000 square feet;
18 acres ground; one 60 and
two 40 horsepower engines and
woodworking machines. Good
location and best factory building
in Arkansas.

IF INTERESTED ADDRESS

CACHE VALLEY LUMBER CO.
Defiance, Ohio

THREE STATES LUMBER CO.

Manufacturers of

SOUTHERN HARDWOODS
Cottonwood and Red Gum
SPECIALTIES

Main Office, Memphis, Tenn.

BLUESTONE LAND & LUMBER COMPANY

MANUFACTURERS

West Virginia Hardwoods

SOFT WHITE PINE
OAK POPLAR
CHESTNUT HEMLOCK

BAND SAWED STOCK

Complete Planing Mill Facilities

RIDGWAY, PENNSYLVANIA

W H Y ?

WHY DO more than 320 of the most prominent and successful lumber manufacturers exchange nearly \$26,000,000 of indemnity against fire loss at

Manufacturing Lumbermen's Underwriters

B E C A U S E !

BECAUSE it is the oldest and strongest inter-insurance association among lumbermen, being now in its fourteenth year.

BECAUSE \$728,910.41 cash savings have been returned to members.

BECAUSE \$756,787.21 cash surplus, owned entirely by the members, has been accumulated.

BECAUSE \$2,012,427.96 has been paid in losses under prompt and equitable adjustments without resort to quibbling or technical controversy.

BECAUSE it was the first to settle lumber losses on a market value basis.

BECAUSE the regular, frequent and thorough inspections given the plants of all members help them to prevent fires, thus materially reducing both the fire waste and the cost of indemnity.

FOR FULL PARTICULARS ADDRESS

Western Representative
HARRY B. CLARK,
Portland, Ore.

Harry Rankin & Co.

Attorney in Fact,
KANSAS CITY, MO.

Advertisers' Directory

NORTHERN HARDWOODS.

American Lumber & Mfg. Co.....	17
Arpin Hardwood Lumber Co.....	66
Beecher & Barr.....	16
Bradley, E. C., Lumber Co.....	15
Brown Brothers Lumber Company.....	66
Buffalo Hardwood Lumber Co.....	67
Coale, Thos. E., Lumber Company..	17
Cobbs & Mitchell, Inc.....	3
Craig, W. P., Lumber Co.....	17
Crane, W. B. & Co.....	55
Creith, H. C. & Co.....	2
Curl, Daniel B.....	16

Darling, Chas. & Co.....	55
Elias G. & Bro.....	67
Estabrook-Skeele Lumber Co.....	5

Flanner-Steger Land & Lumber Co.	
Forman Company, Thomas.....	64
Goodyear, C. A., Lumber Co.....	66

Hadentine Lumber Company, Inc....	1
Hanson-Turner Company.....	62
Heyser, W. E. Lumber Co.....	14
Holyoke, Chas.....	16
Holloway Hardwood Lumber Co.....	

Jones Hardwood Company.....	16
-----------------------------	----

Kent, J. S., Company.....	17
Klann, E. H.....	55
Kneeland-Bigelow Company, The...	3

Litchfield, William E.....	16
Long-Knight Lumber Company.....	

Maisey & Dion.....	5
MacLaren, D. B., Lumber Company...	60
McIlvain, J. Gibson, & Co.....	2
McLean, Hugh, Lumber Co.....	67
McParland Hardwood Lumber Co....	55
Miller, Anthony.....	67
Mitchell Bros. Company.....	3
Mowbray & Robinson.....	15

Oelhafen Lumber Company.....	66
Osgood & Richardson.....	55

Palmer & Parker Co.....	17
Parry, Chas. K. & Co.....	16
Perrine-Armstrong Company.....	60

Salling-Hanson Company.....	64
Sawyer-Goodman Company.....	66
Schultz, Holloway Co.....	4
Smith, Fred D.....	55
Standard Hardwood Lumber Co.....	67
Stearns Salt & Lumber Company.....	9
Stephenson, L. Company, The.....	64
Stewart I. N. & Brother.....	67
Stimson, J. V., & Co.....	60
Sullivan, T. & Co.....	67

Tegge Lumber Co.....	
----------------------	--

Vinke, J. & J.....	64
VonPlaten Lumber Co.....	64

Webster Lumber Co., George.....	17
White, Wm. H. Co.....	68
Wiggin, H. D.....	16
Williams, Ichabod T. & Sons.....	1
Willson Bros. Lumber Company.....	16
Wisconsin Land & Lumber Co.....	64
Wistar, Underhill & Nixon.....	17
Wood-Mosaic Company.....	60

Yeager Orson E.....	67
Young, D. & Co.....	3

SOUTHERN HARDWOODS.

American Lumber & Mfg. Co.....	17
Anderson-Tully Company.....	9
Atlantic Lumber Company.....	1
Baker-Matthews Mfg. Co.....	65
Baker, P. T. & Son.....	51
Benneth & Witte.....	15
Berthold & Jennings Lumber Co....	10
Bluestone Land & Lumber Co.....	51
Boice Lumber Company.....	10
Booker-Cecil Company.....	11
Bradley, E. C., Lumber Co.....	15
Brown, W. P., & Sons Lumber Co....	11
Buffalo Hardwood Lumber Co.....	67

Carrier Lumber & Mfg. Co.....	18
Cherokee Lumber Co.....	7
Coale, Thos. E., Lumber Company.....	17
Crane, W. B. & Co.....	55
Creith, H. C. & Co.....	2
Curl, Daniel B.....	16
Darling, Chas. E. & Co.....	55
Davis, Edward L., Lumber Company	11
Dempsey, W. W.....	17
Duhlmeier Brothers.....	14

Elias, G. & Bro.....	67
Estabrook-Skeele Lumber Co.....	5

Farrin, M. B., Lumber Company.....	14
Faust Bros. Lumber Co.....	18
Flanner-Steger Land & Lumber Co.	

Garetson-Greaseon Lumber Co.....	65
Green River Lumber Company.....	

Hadentine Lumber Company, Inc....	1
Hamilton, J. V.....	15
Heyser, W. E., Lumber Company.....	14
Hill Brothers Tie & Lumber Co.....	10
Himmelberger-Harrison Lumber Co.	65
Hitt, H. H., Lumber Company.....	65
Holloway Hardwood Lumber Co.....	
Huddleston-Marsh Lumber Co.....	

Kent, J. S., Company.....	17
Kentucky Lumber Co.....	14
Keys-Walker Lumber Co.....	6
Kimball & Kopcke.....	3
Klann, E. H.....	55

Lamb-Fish Lumber Co.....	8
Litchfield, William E.....	16
Little River Lumber Company.....	18
Logan-Maphet Lumber Co.....	6
Long-Knight Lumber Company.....	
Louisiana Long Leaf Lumber Co.....	65
Louisville Point Lumber Company...	11
Love, Boyd & Co.....	7

Maisey & Dion.....	5
Maley, Thompson & Moffett Co.....	13
Maphet & Shea Lumber Company...	6
McIlvain, J. Gibson, & Co.....	2
McLean, Hugh, Lumber Co.....	67
McParland Hardwood Lumber Co....	55
Miller, Anthony.....	67
Mowbray & Robinson.....	15

Norman Lumber Company.....	11
----------------------------	----

Ohio River Saw Mill Company.....	11
Osgood & Richardson.....	55

Paepcke-Leicht Lumber Company..	16
Parry, Chas. K. & Co.....	10
Peytona Lumber Company, Inc.....	

Radina, L. W., & Co.....	15
Ransom, J. B., & Co.....	7
Ritter, W. M., Lumber Company.....	68
Russe & Burgess, Inc.....	18

Salt Lick Lumber Company.....	65
Schultz, Holloway Co.....	4

Slaymaker, S. E. & Co.....	1
Smith, Fred D.....	55
Standard Hardwood Lumber Co.....	67
Stewart, I. N., & Brother.....	67
Stimson, J. V., & Co.....	60
Sullivan, T. & Co.....	67

Tennessee Hardwood Lumber Co....	7
Three States Lumber Company.....	51

Vestal Lumber & Manufacturing Co.	6
Vinke, J. & J.....	64
Von Platen Lumber Co.....	64

Webster Lumber Co., George.....	17
West Virginia Timber Company.....	10
Whitmer, Wm. & Sons.....	16
Wiggin, H. D.....	16
Williams, Ichabod T. & Sons.....	1
Willson Bros. Lumber Company.....	16
Wistar, Underhill & Nixon.....	17
Wood-Mosaic Company.....	60
Wood, R. E., Lumber Company.....	17

Yeager, Orson E.....	67
----------------------	----

POPLAR.

Anderson-Tully Company.....	9
Atlantic Lumber Company.....	1
Baker, P. T. & Son.....	51
Farrin, M. B., Lumber Company.....	14
Faust Bros. Lumber Company.....	18
Green River Lumber Company.....	
Kentucky Lumber Company.....	14
Keys-Walker Lumber Company.....	1
Logan-Maphet Lumber Co.....	6
Maphet & Shea Lumber Company.....	6
Peytona Lumber Company, Inc.....	10
Radina, L. W. & Co.....	15
Ritter, W. M., Lumber Company.....	68
Vansant, Kitchen & Co.....	68
West Virginia Timber Company.....	10
Wood, R. E., Lumber Company.....	17
Yellow Poplar Lumber Company.....	68

VENEERS AND PANELS.

Acme Veneer & Lumber Company...	13
Adams & Raymond Veneer Co.....	61
Ahnapee Veneer & Seating Co.....	62
Astoria Veneer Mills & Dock Co....	63
Cadillac Veneer Company.....	
Central Veneer Company.....	61
Gorham Brothers Company.....	
Hanson-Turner Company.....	62
Hoffman Bros. Company.....	61
Huddleston-Marsh Lumber Co.....	
Jarrell, B. C. & Co.....	61
Kentucky Veneer Works.....	61
Kiel Wooden Ware Company.....	62
Knoxville Veneer Company.....	6
Louisville Veneer Mills.....	11
Maley, Thompson & Moffett Co.....	13
Mengel, C. C. & Bro. Company.....	11
Ohio Veneer Company.....	13
Penrod Walnut & Veneer Co.....	61
Rayner, J.....	5
Radford-Portsmouth Veneer Co....	55
Sheppard Veneer Company.....	61
Southern Veneer Manufacturing Company.....	63
Underwood Veneer Company.....	63
Veneer Manufacturers' Company.....	
Walker Veneer & Panel Co.....	55
Willey, C. L.....	1
Williams, Ichabod T. & Sons.....	1
Wisconsin Seating Company.....	62
Wood-Mosaic Company.....	60

MAHOGANY, WALNUT, ETC.

Acme Veneer & Lumber Company...	13
Astoria Veneer Mills & Dock Co....	63
Duhlmeier Brothers.....	14
Hamilton, J. V.....	15
Huddleston-Marsh Lumber Co.....	68
Maley, Thompson & Moffett Co.....	13
Mengel, C. C. & Bro. Company.....	11
Palmer & Parker Co.....	17
Penrod Walnut & Veneer Co.....	61
Purcell, Frank.....	65

Rayner, J.....	5
Willey, C. L.....	1
Williams, Ichabod T. & Sons.....	1

HARDWOOD FLOORING.

Arpin Hardwood Lumber Co.....	66
Beecher & Barr.....	16
Carrier Lumber & Mfg. Co.....	18
Cobbs & Mitchell, Inc.....	3
Eastman, S. L., Flooring Co.....	64
Farrin, M. B. Lumber Company.....	14
Forman, Thos., Company.....	64
Kerry & Hanson Flooring Co.....	64
Louisiana Long Leaf Lumber Co....	65
Mitchell Bros. Company.....	3
Robbins Lumber Co.....	66
Salt Lick Lumber Company.....	65
Stearns Salt & Lumber Company.....	9
Stephenson, I., Company, The.....	64
Webster Lumber Co., George.....	17
White, Wm. H. Co.....	68
Wilce, T., Company, The.....	5
Wisconsin Land & Lumber Co.....	64
Young, W. D., & Co.....	3

WOODWORKING MACHINERY.

Cadillac Machine Co.....	59
Defiance Machine Works, The.....	12
Hanchett Swage Works.....	57
Linderman Machine Co., The.....	
Mershon, W. B., & Co.....	59
Phoenix Manufacturing Co.....	59
Saranac Machine Company.....	58
Smith, H. B., Machine Co.....	
Steinmetz, C. M.....	16
Westinghouse Electric & Mfg. Co..	

LOGGING MACHINERY.

Baldwin Locomotive Wks.....	
Clyde Iron Works.....	59
Lidgerwood Mfg. Co.....	16
Russel Wheel & Foundry Co.....	

DRY KILNS AND BLOWERS.

Grand Rapids Veneer Works.....	58
Phila. Textile Mch. Co.....	1

SAWS, KNIVES AND SUPPLIES.

Atkins, E. C., & Co.....	
Simonds Mfg. Co.....	

LUMBER INSURANCE.

Central Manufacturers' Mut. Ins. Co.	
Epperson, U. S.....	6
Indiana Lumbermen's Mut. Ins. Co.	11
Lumber Mutual Fire Insurance Co..	13
Lumbermen's Mutual Ins. Co.....	11
Lumbermen's Underwriting Alliance	
Lumber Underwriters.....	18
Pennsylvania Lumbermen's Mutual Fire Ins. Co.....	5
Rankin, Harry & Co.....	51

TIMBER LANDS.

Lacey, James D., & Co.....	4
Spry, John C.....	5

MISCELLANEOUS.

American Freight Audit & Storage Company.....	18
Astoria Veneer Mills & Dock Co....	63
Cache Valley Lumber Company.....	51
Childs, S. D., & Co.....	33
Gerlach, The Peter, Company.....	35
Lumbermen's Credit Association.....	5
Mechanical Rubber Company.....	55
Tamms Silica Company.....	58
Wausau Advancement Association...	2
Westinghouse Electric & Mfg. Co..	

CLASSIFIED ADVERTISEMENTS

Advertisements will be inserted in this section at the following rates:

For one insertion.....20c a line
For two insertions.....35c a line
For three insertions.....50c a line
For four insertions.....60c a line

Eight words of ordinary length make one line. Heading counts as two lines. No display except the headings can be admitted.

Remittances to accompany the order. No extra charges for copies of paper containing the advertisement.

EMPLOYEES WANTED

WANTED

A practical buyer and inspector for wagon stock with headquarters at Memphis, Tenn. Address "BOX 96," care HARDWOOD RECORD.

WANTED

Salesmen on our New Census publications. Splendid opportunity. Men making \$50 to \$75 per week. RAND, McNALLY & CO., Dept. B., Chicago, Ill.

WANTED

First-class band saw filer; hardwood mill, immediately. J. V. STIMSON, Huntingburg, Ind.

WANT GAUGER

for Hardwood Flooring Plant. Latest Hoyt machines. Must be competent man.

SEAMAN, KENT CO., Fort William, Ont.

IF YOU WANT

competent employees in any department of the hardwood business, there is no better way of securing them than by employing the Classified Advertisements section of HARDWOOD RECORD, which reaches woodsmen, sawmill men and salesmen in all parts of the country.

EMPLOYMENT WANTED

POSITION WANTED

A man 48 years old, of excellent habits and a first-class lumberman would like a position of any kind. Road job preferred. References given and required. Address

"BOX 95," care HARDWOOD RECORD.

WANTED—EMPLOYMENT

When you want a salesman for New York state territory, write us. We can supply you with a good man. EMPIRE STATE ASSOCIATION of Wholesale Lumber & Sash & Door Salesmen. Chas. Johnson, Sec'y, 96 Kirkland Rd., Rochester, N. Y.

WAGON STOCK WANTED

WANTED—WAGON STOCK

Wagon tongues, reaches, bolsters, hickory dimension stock for buggy and wagon work. Inspection at mill points.

J. A. BROWNE & CO., INC., North Manchester, Ind.

I AM IN THE MARKET FOR

75 to 100 cars of oak poles, bolsters, sand boards, eveners, and reaches; and hickory and maple axles. Will inspect at shipping point, and pay cash. E. B. BROWN, 372 Bayne St., Buffalo, N. Y.

TIMBER ESTIMATING

TIMBER ESTIMATES

Estimating Southern timber a specialty. Maps, detailed reports as to stand, quality and logging conditions. Have a few high-class properties for sale. Can furnish best references.

THOS. J. McDONALD,
East Tenn. Natl. Bank Bldg.,
Knoxville, Tenn.

LOGS WANTED

WANTED—BLACK WALNUT LOGS

500 cars good black walnut logs, 10" and up in diameter, 6 ft. and up long. Will inspect at shipping point and pay cash.

GEO. W. HARTZELL, Dayton, Ohio.

WANTED—HARDWOOD LOGS

200,000 ft. 28" and up White Oak logs.
200,000 ft. 12" and up Walnut logs.
50,000 ft. 12" and up Cherry logs.
C. L. WILLEY, 2558 S. Robey St., Chicago.

TIMBER LANDS FOR SALE

TIMBER LANDS.

Virgin Oak, Poplar and Chestnut. 3,600 acres. Clay County, North Carolina. Now owned by us. Titles perfect. Other timber adjacent. 10 miles from a railroad. Near Murphy branch of Southern. Now operating at Heidelberg, Kentucky, and do not need above tract. A low price for a quick sale. Please write us quickly. THOMAS FORMAN COMPANY, Detroit, Mich.

ARE YOU INTERESTED IN GUM and Red Oak?

I own in fee simple two small and carefully selected tracks of high-class gum and red oak stumpage. Will sell at price to make the buyer good money either as an investment or as an operating proposition.

Will deal with principals only. Address in confidence, "BOX 22," care HARDWOOD RECORD.

LUMBER FOR SALE

THICK POPLAR FOR SALE

6 to 9 months on sticks, 2½ and 4" Poplar, common and better. Write for prices.

C. M. CRIM & SON, Salem, Ind.

LUMBER FOR SALE.

4 cars 4/4, 1sts and 2nds bone dry Sycamore, standard widths and lengths.
2 cars 4/4x13" and up dry plain 1sts and 2nds Red Oak, 50% 14 and 16 feet.
5 cars 4/4 No. 1 Com. Red Gum, bone dry.
W. D. REEVES LBR. CO., Helena, Ark.

DIMENSION STOCK WANTED

WANTED—DIMENSION STOCK

Oak, plain and quartered; boards and squares. Also dogwood and persimmon.

INDIANA QUARTERED OAK CO.,
7 East 42d St., New York, N. Y.

GLUED-UP POPLAR OR BASSWOOD

Dimension Stock to finish 7/8"x19"x36" in car-load lots. Will furnish specifications upon request. ARTHUR BAILEY & CO., No. 1 Madison Ave., New York, N. Y.

WANTED

One-half car 3x3" clear Oak Squares;

One-half car 4x4" clear Oak Squares in lengths not less than 20". Quote prices f. o. b. Rochester. LANGSLOW, FOWLER CO., Rochester, N. Y.

WANTED—SMALL DIMENSIONS

We are always in the market for short dimensions in Oak Squares; also 3/4, 4/4, 5/4 and 6/4 Quartered White Oak 16 to 24" long; also Plain Oak 1x2 and wider, 12 to 54" long. We also handle the standard length hardwoods. What have you to offer for cash? Best of bank reference.

FURNITURE & CHAIR STOCK Co.,
5150 Chestnut St., Philadelphia, Pa.

LUMBER WANTED

BUYERS OF HARDWOODS.

Do you want to get in touch with the best buyers of hardwood lumber? We have a list, showing the annual requirements in lumber, dimension stock and veneers and panels of consumers of those materials throughout the United States and Canada. The service is free to advertisers in the RECORD. It will interest you. Write us for further information about our "Selling Lumber by Mail System."

HARDWOOD RECORD, Ellsworth Bldg.,
Chicago.

TIMBER FOR SALE

OAK AND PINE TIMBER FOR SALE

50,000 M White Oak, 40,000 M Red Oak, 25,000 M Pine, 3 miles from Cornwall, 110 miles from St. Louis, Mo., \$200.

WM. CARPENSTEIN,
205½ Washington St., Portland, Ore.

BUSINESS OPPORTUNITIES

FOR SALE

One band mill, and about one hundred million feet of hardwood stumpage. Very easy terms. Address owner, P. O. BOX "K," Pensacola, Fla.

veneer plant for sale

To close out our Veneer Plant at this place we are offering the entire plant, having a daily cutting capacity of 20,000 feet of logs into Basket and Crate stock.

Machinery lists on application, consisting of lathes, jointers, planers, re-saws, hamper, crate, butter-dish machinery and patents.

BRIDGEPORT WOODENWARE MFG. CO.,
Bridgeport, Ala.

EXCELLENT OPPORTUNITY

for man to go in manufacturing business. Have well-equipped hardwood factory suitable for making spokes and vehicle stock. Healthy location in town six thousand, on two rivers and two railroads. Address

"BOX 72," care HARDWOOD RECORD.

FOR SALE

A well-equipped Basket and Veneer Plant, well located for timber, shipping facilities and for the market of its products. Factory statement based on actual results. Reason for selling and other information cheerfully given on application. Address "L. V.," care HARDWOOD RECORD.

FOR SALE

Ash Handle Factory, located in a northern Indiana town with two good railroads. Good timber location. Factory running and making money. 100 H. P. boiler and engine. Elevated iron supply tank. Hot water pump. New Philip Smith 8 ft. bolter, rip table, equalizer; 1 No. 10 Ober automatic lathe; 1 St. Mary's center lathe, pulleys, belting, saws, tools, etc., sawmill. Steel store shed 20x50. Good reasons for wanting to sell. Present owners would retain interest if desired. Address

"BOX 109," care HARDWOOD RECORD.

FULLY EQUIPPED SAWMILL

with dry kiln and planing mill, 40,000 feet capacity. Forty or fifty million feet of long leaf yellow pine and cypress timber. Now operating. Good reasons for selling. Address

DEAN REALTY & IMPROVEMENT CO.,
Waycross, Ga.

MACHINERY FOR SALE**FOR SALE**

Rim Bending Outfit consisting of Defiance 12" Bender, Whitney Double Surfacers, Rip Saw, Double Cut-off Saw, Jointer, etc., good as new, at a bargain.

JACOB HAISH COMPANY, DeKalb, Ill.

FOR SALE

6 foot band mill, carriage, edger, trimmer, filing room equipment, 2 boilers, engine, etc., complete.

1—18 ton 42" gauge Shay locomotive.

12—Skeleton logging cars, 42" gauge.

2—24 ft. flat cars, 42" gauge.

All the above in first-class condition.

THE PRENDERGAST COMPANY, Marion, O.

FOR SALE

Complete Band Mill located at Memphis, Tenn. For particulars address

ISAAC WRIGHT, Memphis, Tenn.

MISCELLANEOUS**BAUGHMAN'S BUYER AND SELLER**

The twelfth edition of the handy book for lumbermen just out, revised, improved. See the new side tables, the metric system, tapering timber, to figure narrow flooring, moulding, box work, etc. Five sections, each indexed and a separate work. Every page worth the price of the book. The book that talks to lumbermen. Not millions, but more than seventy-five thousand copies have been sold to lumbermen. Bound in red flexible cover, \$2.50 per copy prepaid. Orders filled day received. Address

H. R. A. BAUGHMAN, Indianapolis, Ind.

OAK, POPLAR, ASH

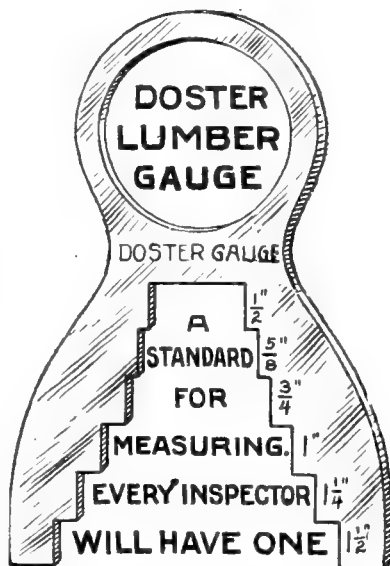
and all other hardwoods, in all grades and thicknesses, can be readily sold if advertised in the Wanted and For Sale section of HARDWOOD RECORD. If you have a large stock you want to sell try a few lines in this department and see what a lot of inquiries they will bring you.

WANTED—HARDWOOD LUMBERMEN—

to try the Gibson Tally Book. The three-throw aluminum tally ticket cover accommodates any form of ticket desired. The use of the special triplicate tally ticket supplied, printed on waterproof paper with carbon backs makes tallies unalterable. For durability, convenience, accuracy and for systematizing the inspection of lumber the Gibson tally method can't be beat.

Special forms of tally tickets mailed on application. Covers sold on approval to responsible concerns.

HARDWOOD RECORD,
537 So. Dearborn St., Chicago.



For sale by HARDWOOD RECORD,
537 S. Dearborn St., Chicago, Ill.
50 CENTS EACH.

COUNTERFEIT CHECKS

are frequent except where our

Two Piece Geometrical Barter Coin is in use, then imitation isn't possible. Sample if you ask for it.

S. D. CHILDS & CO.
Chicago

We also make Time Checks, Stencils and Log Hammers.

**CHICAGO**

Osgood & Richardson
935 Peoples Gas Bldg.

NORTHERN AND SOUTHERN
HARDWOODS

Chicago Agents: LAMB-FISH LUMBER CO.

Telephone Canal 1688

CHAS. DARLING & CO.
HARDWOOD LUMBER
22nd Street and Center Avenue
CHICAGO

McParland Hardwood
Lumber Co. 2204 S. Laflin St.
HARDWOODS
FRED D. SMITH
HARDWOOD LUMBER
1337-1343 North Branch St. CHICAGO

E. H. KLANN
Cottonwood, Gum, Oak, Ash, Cypress, Yellow Pine, Dimension Stock
819 FISHER BLDG. CENT. 3825

Oak Timber and Plank, Paving Blocks, Posts and Yellow Pine

W. B. CRANE AND COMPANY
Established 1881
HARDWOOD LUMBER, TIMBER and TIES
CHICAGO

Long Distance Phones: CANAL 3190-3191
Office, Yards and Planing Mill: Mill at
22nd, Sangamon and Morgan Sts. Falcon, Miss.




A Veneer Gauge is the answer to a Veneer User's craving for years. This "Walker Brand" Veneer Gauge is a steel gauge that will satisfy your wants for all time. You can't do yourself a better turn than to buy one of these gauges. It gauges ACCURATELY every thickness from 1-40 inch to 1/2 inch INCLUSIVE. Wake up to this opportunity. Price only \$1.98 delivered by U. S. Mail. Order now, today. Address—6456 Woodlawn Ave. Phone Hyde Park 23.

WALKER BRAND
CHICAGO

99% Pure **SILICA**
OR SILEX FOR WOOD FILLERS
UNIFORMLY GROUND
SEND FOR SAMPLE
TAMMS SILICA CO., 19 So. 5th Ave., Chicago

Gerlach Modern Machines
Produce the Cheapest and Best
COOPERAGE STOCK
and **BOX SHOOKS**
Circular, Band and Cylinder Saws
SAW AND LOG TOOLS
THE PETER GERLACH CO., Cleveland, 6th City, U.S.A.

Doesn't It Look Good To You?



MICHIGAN, GRAND RAPIDS: Stow & Davis Furniture Company; tables: George A. Davis, buyer; 40,000 feet 4/4 basswood; 15,000 feet 4/4 red birch; 30,000 feet 4/4 sound wormy chestnut; 30,000 feet 4/4 cull gray elm; 30,000 feet 4/4 and 8/4 mahogany; 15,000 feet 4/4 and 6/4 hard maple; 20,000 feet 5/4 and 6/4 soft maple; 25,000 feet 4/4 plain red oak; 75,000 feet 4/4 plain white oak; 200,000 feet 4/4 quartered white oak; 20,000 feet 4/4 poplar; 50,000 feet red gum, all thicknesses. Dimension stock: Buyers of 3x3—30 oak squares. Panel stock: Buyers of 5-ply quartered oak and mahogany table tops.

HARDWOOD RECORD CHICAGO

Specimen of one of the thousands of patented tabbed index cards involved in Hardwood Record's copyrighted Information Service, showing annual requirements for Lumber, Dimension Stock, Veneers and Panels employed by wholesalers and hardwood manufacturing consumers throughout the United States and Canada.



Illustration of Oak Cabinet in which this Information Service is filed.

ILLINOIS

Key

1	Ash	12	Hickory
2	Basswood	13	Mahogany
3	Beech	14	Maple
4	Birch	15	Oak
5	Butternut	16	Walnut
6	Cherry	17	Poplar
7	Chestnut	18	Miscellaneous including
8	Cottonwood		Dogwood, Holly, Locust,
9	Cypress		Persimmon, Sycamore..
10	Elm	19	Dimension stock
11	Gum	20	Veneers and panel stock

Fac-simile of state key card between which the tabbed information cards are filed alphabetically by towns, by means of which instant reference can be made to the buyers of any kind of wood, in any locality in the United States and Canada.

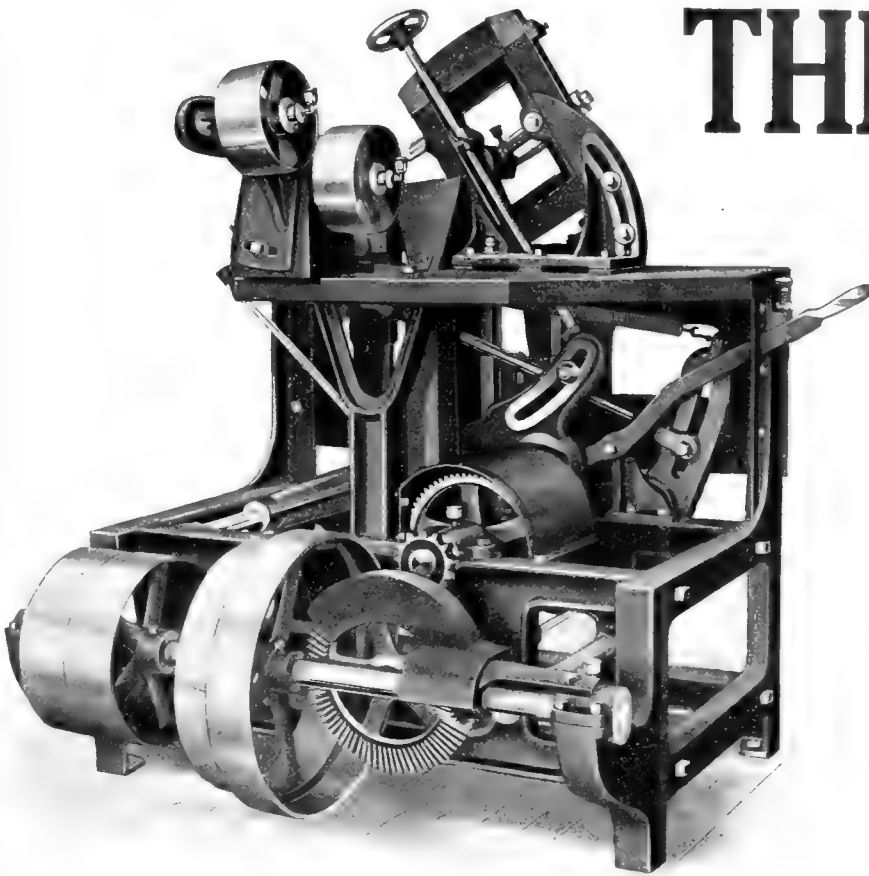
THIS service is comprised in more than fifty bulletins, and additional bulletins of corrections and additions are printed frequently.

This service is kept positively up-to-date, and is indispensable to lumber and veneer sales departments.

It is an exclusive service disposed of only to HARDWOOD RECORD advertisers.

LET US TELL YOU ABOUT THE MODERATE COST

Hardwood Record, 537 South Dearborn Street, Chicago



HANCHETT 218 BAND SHARPENER—Back View
(Solid—Rigid—Free from Vibration)

THE FILING ROOM

**Are you after results?
Do you want to in-
crease your earnings?**
No matter what your present equipment may be you can not saw good lumber and a lot of it unless your saws are kept sharp and in good condition. To have good sharp free cutting saw teeth a minimum saw kerf at a

maximum speed requires thoroughly modern saw fitting tools.

Remember, we have equipped a majority of the largest modern saw mills including the U. S. and Japanese Governments. There is a reason why these Governments specified Hanchett Filing Room Machinery.

Ask for Catalog No. 11, Just Out. 104 Pages

HANCHETT SWAGE WORKS, Big Rapids, Mich., U.S.A.

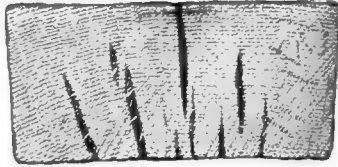
Hanchett Swage Works, Big Rapids, Mich.

Please send me your catalog and a 1 oz. bottle of Brazing Fluid, free of all expense to me.

Employed by _____

Equipment needed in filing room _____

Name _____ State _____ City _____



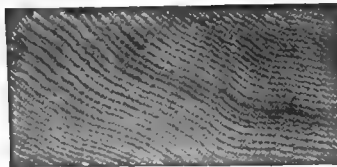
If you attempt to dry two-inch oak in your kiln in fourteen days the result will probably resemble the above illustration.

The lower picture is from a photograph of two-inch oak dried by the Grand Rapids Veneer Works Process in fourteen days, and every plank as sound as the sample.

The absence of checks is not the only saving due to this process. The lumber is straight, soft and free from sap or acids.

For a small sum of money your old kilns can be converted to G. R. V. W. Process Kilns, with a guarantee to give the results above described.

Grand Rapids Veneer Works
GRAND RAPIDS, MICH.



ELEPHANT RUBBER BELTING

AIR DRILL AND AIR TOOL

HOSE

STEAM
WATER
SUCTION

EXTRA QUALITY

Recommended for hard service
and guaranteed to do the work



SELLING AGENTS

CRANE COMPANY - - ALL BRANCHES
STANDARD EQUIPMENT CO., MOBILE, ALA
ALBANY MILL SUPPLY CO., ALBANY, GA.

**THE MECHANICAL
RUBBER COMPANY**

(Chicago Rubber Works)

307 W. Randolph Street,
ESTABLISHED 1882

CHICAGO

Corrugated Joint Fasteners

Can be quickly and
cheaply driven with

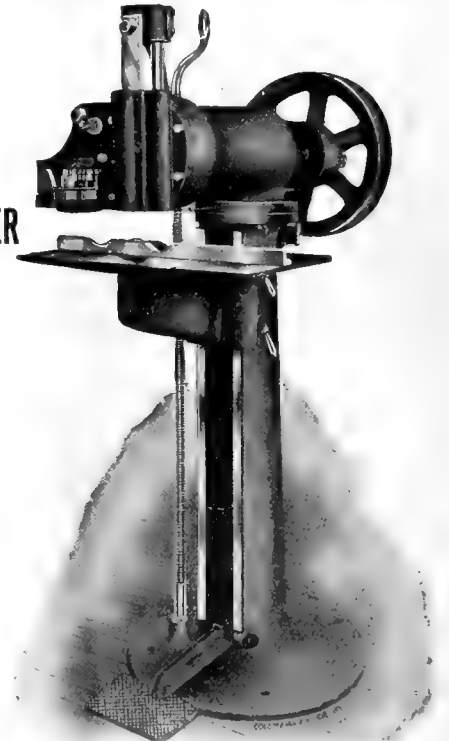
**"ADVANCE"
CORRUGATED
JOINT FASTENER
MACHINE**

Made in Different
Types to Meet
All Conditions

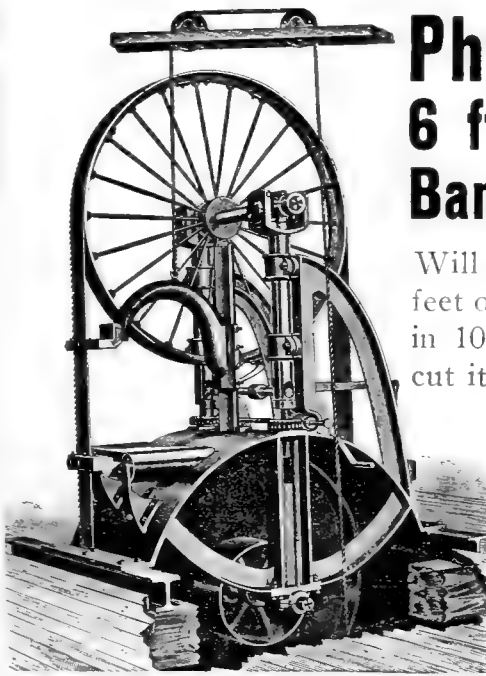
Specially suitable for
manufacturers of
sash, doors, blinds,
screens, coffins,
furniture, plumbers'
wood-work, porch
columns, boxes,
refrigerators, etc.

Write for bulletins
and prices.

Manufactured only
by



Saranac Machine Co., St. Joseph, Michigan



Phoenix 6 ft. Pony Band Mill

Will cut 30,000
feet of 1" lumber
in 10 hours and
cut it good.

Nearly 200
of these
mills sawing
wood in the
U. S. A.

PRETTY GOOD
RECOMMEN-
DATION, ISN'T IT?

MODERATE PRICE

PHOENIX MFG. CO.
EAU CLAIRE WISCONSIN

"CLYDE-GRADE Than which there is None better"

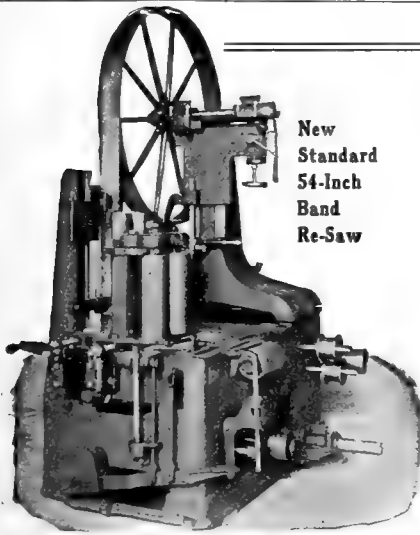
It doesn't seem possible to build Logging Machinery of greater economy and efficiency than that described and illustrated in this new catalog of ours; but of course if it ever becomes possible, we will build it.

Our FACTORY at DULUTH

Ask for CATALOG

THE NEW ONE

CLYDE IRON WORKS
Manufacturers at DULUTH, Minnesota, U.S.A. of
CLYDE-GRADE Logging and Hoisting Machinery.

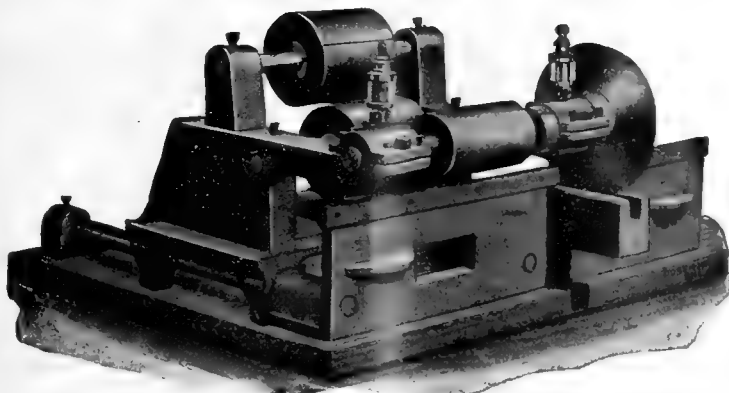


New
Standard
54-Inch
Band
Re-Saw

MERSHON BAND-RESAWS

"A Specialty, Not a Side Issue."

Wm. B. Mershon & Co., SAGINAW, MICH.,
— U. S. A. —



BUTTING SAW for Flooring Factories

For cutting out defects and making square and smooth ends for end-matching machines. Used by the largest producers. Write for particulars and prices.

Manufactured by
Cadillac Machine Co.
CADILLAC, MICH.

INDIANA

WHERE THE BEST HARDWOODS GROW

LET us talk to you about the plain and quartered oak that made Indiana famous. It's the kind we make to-day.

Wood-Mosaic Co., New Albany, Ind.

D. B. MacLaren Lumber Co. HARDWOOD LUMBER

Evansville, Ind.

5 cars 4/4 No. 1 common Quartered White Oak
4 cars 4/4 No. 1 common Plain Red Oak
2 cars 4/4 No. 2 common Plain Red Oak
1 car 4/4 No. 1 common Poplar
1 car 4/4 Nos. 1 and 2 Red Gum

"Three Mills in Indiana" Used to Be the Slogan. Now There's Only One Left, but It's

The Largest Band Mill in Indiana

"From Toothpicks to
Timbers 60 Feet Long"

PERRINE-ARMSTRONG COMPANY

Fort Wayne, Indiana

Both Ends and the Middle

HARDWOOD RECORD reaches most everybody who produces markets and consumes Hardwoods.

Nothing But Hardwoods

ANY REASONABLE OFFER

QUARTERED WHITE OAK.
5,830' 3/4" 1s-2s.
10,500' 5/4" 1s-2s.
10,800' 6/4" 1s-2s.
8,000' 3/4" No. 1 Com.
20,000' 4/4" No. 1 Com., 10" & up
57,000' 5/4" No. 1 Com.
4,080' 6/4" No. 1 Com.
9,700' 4/4" Clear Strips, 5" and 5 1/2".

11,970' 4/4" Clear Strips, Sap no defect, 2" to 4".
27,000' 4/4" No. 1 Common Strips, 2" & up.
45,000' 4/4" No. 2 Common.
5,390' 5/4" No. 2 Common.
PLAIN RED OAK
2,200' 2 1/2" Com. & Better.
7,200' 3" Com. & Better.
1,700' 4" Com. & Better.

45,000' 4/4" No. 1 Com.
21,000' 4/4" No. 2 Com. Red and White.
QUARTERED RED OAK
21,000' 4/4" 1s-2s 6" & 7" wide.
15,000' 4/4" Clear Strips, Sap no defect, 2 1/2" & up.
10,800' 6/4" No. 1 Com.

PLAIN POPLAR
5,000' 4/4" 1s-2s Yellow, 7" & up
8,600' 4/4" Box Boards, 18" to 17".
8,500' 6/4" 1s-2s Yellow, 7" & up
30,000' 6/4" No. 1 Common.
12,000' 4/4" Clear Strips.
21,000' 6/4" Clear Strips.
QUARTERED POPLAR.
16,900' 4/4" 1s-2s.
8,000' 4/4" No. 1 Common.

WILL BUY THE FOLLOWING STOCK:
DRY—IN FINE CONDITION

We, of course, have a complete stock of Quartered and Plain Oak, Poplar and Hickory, etc., in all grades and thicknesses, and will be glad to have your inquiries for anything you may need.

J. V. STIMSON & CO.

OWENSBORO, KY.

If you want to reach the wholesale consumers of hardwood lumber throughout the United States, a HARDWOOD RECORD advertisement will do it for you.

If you want to reach the hardwood manufacturers of the United States, a HARDWOOD RECORD advertisement will do it for you.

The HARDWOOD RECORD represents high-class, special, class circulation, with a minimum of waste circulation.

Ask any HARDWOOD RECORD advertiser for experience on results.

VENEERS AND PANELS

The Central Veneer Co.

**SOFT YELLOW POPLAR
CROSS BANDING**

Huntington, West Virginia

B. C. JARRELL & CO.

MANUFACTURERS OF

**Rotary-Cut Gum and Poplar
VENEERS**

Well manufactured, thoroughly
KILN DRIED and FLAT

HUMBOLDT, - TENNESSEE

"WE ARE GETTING RESULTS"

WRITES ONE ADVERTISER

This Means That He Is Getting

NEW BUSINESS

Through His Ad

If we can do it for him is there any logical
reason why we can't for you?

MAKE US PROVE IT

HARDWOOD RECORD, CHICAGO

*Sheppard Veneer Co., Poplar
Winston-Salem, N.C.
Centers, Cross Banding, Drawer Bottoms.*

KENTUCKY VENEER WORKS

ROTARY CUT SAWED AND SLICED
GUM, POPLAR, OAK QUARTERED OAK, MAHOGANY
LOUISVILLE, KENTUCKY

ANY WOOD
ANY THICKNESS

**MANUFACTURERS
OF
VENEERS**

Mixed Car Shipments in Rotary,
Sliced, Sawed Veneers, any
wood, any thickness.

Plain woods—All kinds
Domestic Figured Woods—All kinds
Circassian Walnut and Mahogany
Quartered White Oak, Red Oak, Sycamore,
Figured Gum, Magnolia

QUALITY AND PROMPT SHIPMENT

Place your orders with us and
get Satisfaction and Service.

Same Attention to Small Orders as Large
WRITE US

Adams & Raymond Veneer Co.

Established 1867

Indianapolis, Ind.

U. S. A.

**WE WANT YOUR ORDERS
YOU WANT OUR VENEERS**

KANSAS CITY, MO.

HELENA, ARK.

VENEERS

PENROD WALNUT & VENEER COMPANY

General Offices, KANSAS CITY, MO.

Hoffman Brothers Company
Sliced and Sawed, Quartered
and Plain Red and White
Oak and Mahogany

Walnut Cherry Ash Maple

Let us send you Stock List **FORT WAYNE, IND.**

VENEERS AND PANELS

Ahnapee Veneer & Seating Co.

HOME OFFICE, FACTORY AND VENEER MILL, ALGOMA, WIS.
VENEER AND SAWMILL, BIRCHWOOD, WIS.

We manufacture at our Birchwood plant single ply veneers of all native northern woods and deliver stock that is in shape to glue.

From our Algoma factory, where we have specialized for twenty years, we produce panels of all sizes, flat or bent to shape, in all woods, notably in Mahogany and Quarter-Sawed Oak.

We make no two-ply stock, and do not employ sliced cut quartered oak. Our quartered oak panels are all from sawed veneer.

Every pound of glue we use is guaranteed hide stock. We do not use retainers. Our gluing forms are put under powerful screws and left until the glue has thoroughly set.

If you seek a guaranteed product that is the best, based on results accomplished by most painstaking attention and study of every detail, combined with the use of the best stock and an up-to-date equipment, our product will appeal to you.

If you are a "price buyer" we probably cannot interest you.

KIEL WOODEN WARE CO.

WHEN IN THE MARKET FOR ROTARY CUT

BIRCH
BASSWOOD
OAK
ASH
ELM

VENEER

Write Us

WISCONSIN

KIEL
FACTORY AND MAIN
OFFICE

MELLEN
VENEER AND HEADING
MILL

PANELS PANELS PANELS

In Stock at Chicago Warehouse, 1140 West Lake Street
Telephone Haymarket 3027

WE WANT TO MOVE BEFORE JANUARY 1

3 PLY GOOD 1 SIDE

3/16 Ash 24 x 60	1/4 Ash 24 x 60	1/4 Basswood 24 x 60
30 x 60	30 x 72	

The Wisconsin Seating Company,

New London, Wis.

HOWARD HANSON, President

THOMAS A. TURNER, Secy. and Treas.

THE HANSON-TURNER COMPANY

MANUFACTURERS OF

ROTARY CUT VENEER AND THIN LUMBER

ELM
BEECH
CURLY BIRCH

OAK
MAPLE

BIRCH
BASSWOOD
BIRD'S-EYE MAPLE

SPECIALTIES:

DRAWER BOTTOMS BACK PANELS CENTER STOCK
BACKING PIANO PIN BLOCKS BIRCH DOOR STOCK
CURLY BIRCH BIRD'S-EYE MAPLE

OFFICE and FACTORY at WELLS, N. Y.

VENEERS AND PANELS

Custom Mill Work, Storage, Inspection ON Foreign Fancy Woods, Mahogany, Cedar, Circassian

We receive the logs, store or warehouse them, manufacture them into lumber, cut or saw veneers, pile and store the product, and ship via any railroad. Also furnish inspection returns on logs or lumber. Can furnish accommodations and economies which it is impossible to secure elsewhere.

While we do not buy or sell for our own account, we always have on our yards parcels of plain and figured African, Mexican and Cuban Mahogany, Circassian Walnut and Cedar logs, placed here for sale by direct foreign shippers, from which advantageous purchases can be made.

Astoria Veneer Mills & Dock Co.

Long Island City, New York

Veneers and Panels with a Reputation

WE manufacture Veneers in all the native woods and for all purposes. Also Built-up Panels in native and foreign woods—three and five-ply—and have established a reputation for furnishing high-grade material. Send us your inquiries and orders and become one of our satisfied customers.

Underwood Veneer Co.

Wausau, Wis.

“SOVEMANCO.”

We can furnish anything you want in

Sawed and Sliced Foreign and Domestic Figured Veneers

Capacity 15 million feet per year. Ready to take care of carload orders promptly. Small orders shipped same day received, if desired.

SOUTHERN VENEER MFG. CO., Inc.

Office, 21st and Standard.

LOUISVILLE, KY.

Mills, Magnolia, Standard and 21st Sts.

For Veneer and Panel Manufacturers

Your Consumers' Lists Cost You BIG MONEY

We can save it all and relieve you of all the detail and effort necessary to tabulate consumers' wants. **Our Card Index System of those wants,** just out, is the result of systematic effort. It is endorsed by your competitor.

Can You Afford to Give Him that Advantage?

HARDWOOD RECORD

CHICAGO



MICHIGAN



FAMOUS FOR HARD MAPLE AND GREY ELM

"Ideal" Steel Burnished Rock Maple Flooring

is the flooring that is manufactured expressly to supply the demand for the best. It is made by modern machinery from carefully-selected stock and every precaution is taken throughout our entire system to make it fulfill in every particular its name—"IDEAL."

ROUGH OR FINISHED LUMBER—ALL KINDS

Send Us Your Inquiries

The I. Stephenson Company - **WELLS, MICHIGAN**

SALLING, HANSON CO.

MANUFACTURERS OF

Michigan Hardwoods

GRAYLING, MICHIGAN

"Chief Brand" Maple and Beech Flooring

in $\frac{3}{4}$, $\frac{5}{8}$ and 1-16 and 1 1-16 inch Maple in all standard widths and grades, will commend itself to you and your trade on its merits alone

WRITE US, WE CAN INTEREST YOU

Kerry & Hanson Flooring Co.

GRAYLING, MICHIGAN

1sts & 2nds	4/4	.....	175,000
MICHIGAN	5/4	.....	195,000
MAPLE	8/4	.....	150,000
	10/4	.....	75,000
For shipment from our	12/4	.....	50,000
Detroit Yard during	16/4	.....	110,000
October and November.			

PLEASE WRITE US QUICKLY FOR PRICES

THOMAS FORMAN COMPANY
DETROIT

IXL ROCK MAPLE FLOORING

Birch and
Selected Red Birch

*"The Standard" of Excellence*

Wisconsin Land & Lumber Company
Hermansville, Michigan

BIRCH, ASH, ELM, BASSWOOD AND HEMLOCK LUMBER
Basswood Siding, Ceiling, and Moulding

Von Platen Lumber Co.

Iron Mountain, Michigan

Manufacturers of

**BIRCH
BASSWOOD
ELM
MAPLE**

We Solicit Your Inquiries

SHIPMENTS VIA C. & N. W.—C., M. & ST. P.—W. & M.

S. L. EASTMAN FLOORING CO.
SAGINAW BRAND

MAPLE FLOORING
SAGINAW, MICH.

J. & J. VINKE

Agents for the Sale of

AMERICAN HARDWOODS IN LUMBER AND LOGS
AMSTERDAM, HOLLAND

THE SOUTH

PROMINENT SOUTHERN MANUFACTURERS

Himmelberger-Harrison Lumber Co.

Specialists Red Gum

Mills at
Morehouse, Mo.

Sales Offices
Cape Girardeau, Mo.

Louisiana Long Leaf Lumber Co.

Fisher, Louisiana

Diamond



Brand

OAK FLOORING
A GUARANTEE OF PERFECTION

BE FAIR! Compare the Stock and the Price Won't Scare You

Try a Sample Car of our

OAK, POPLAR, GUM

OR

Short Leaf Yellow Pine

We do not "doctor" the grades

H. H. HITT LUMBER COMPANY

THE **HHH** BRAND TENNESSEE VALLEY HARDWOODS
DECATUR, ALABAMA

Salt Lick Lumber Co.

SALT LICK

KENTUCKY

MANUFACTURERS OF



Oak Flooring

Complete stock of $\frac{3}{8}$ " and $\frac{13}{16}$ " in all
standard widths

GARETSON-GREASON LUMBER CO.

1002-1005 Times Bldg.

ST. LOUIS

MANUFACTURERS

Three Mills

A FEW ITEMS OF DRY STOCK

We Want to Move

2 cars 4/4 1st & 2nds Cypress.	10 cars 4/4 1sts & 2nds Red Gum.
2 cars 4/4 select Cypress.	2 cars 5/4 No. 1 Common Ash.
4 cars 4/4 No. 1 Shop Cypress.	2 cars 4/4 1sts & 2nds Ash.
1 car 2" 1sts & 2nds Cypress.	1 car 2" 1sts & 2nds Ash.
1 car 2" Select Cypress.	2 cars 4/4 18" & wider Panel
1 car 4/4 1sts & 2nds Cotton-	8/4 Cottonwood.
wood.	to 16/4 No. 1 Common and
5 cars 3" mixed oak Crossing	better Plain Red and White
Plank.	Oak.

BAKER-MATTHEWS MFG. CO.

SIKESTON, MO.

WRITE US FOR PRICES

Hardwood Record's

strongest circulation is in the region where
things are made of wood—WISCONSIN,
MICHIGAN, ILLINOIS, INDIANA,
OHIO, PENNSYLVANIA, NEW YORK
and the East. **It's the BEST sales
medium for hardwood lumber.**

Frank Purcell

Kansas City
U. S. A.

Exporter of **Black Walnut Logs**



MARK

**FIGURED WALNUT IN LONG WOOD
AND STUMPS**

WISCONSIN

WHERE THE FINEST NORTHERN HARDWOODS GROW

WE MANUFACTURE MICHIGAN
HARDWOODS AND HEMLOCK.
MILLS ELECTRICALLY
DRIVEN; STOCK
BAND SAWN

Have in Shipping Condition

BIRCH: NO. 2 AND BETTER, 4/4 to 12/4
ASH: NO. 2 AND BETTER, 4/4 to 12/4
ELM: NO. 2 AND BETTER, 4/4 to 12/4
BASSWOOD: NO. 2 AND BETTER, 4/4 to 12/4

WE are well equipped for manufacturing special sizes, wagon stock, skids, ties, etc.

THE C. A. GOODYEAR LUMBER COMPANY
Office and Mill Logging Camp
TOMAH, WISCONSIN BLUE BILL, MICHIGAN

SAWYER GOODMAN CO.

MARINETTE, WIS.

Mixed Cars of Hardwood, Basswood, White Pine and Hemlock, Cedar Shingles and Posts

We make a specialty of White Pine Beveled Siding and White Pine Finish and Shop and Pattern Lumber

A FEW ITEMS IN DRY HARDWOOD for prompt shipment

1 car 5/4 1st & 2nd White Ash	1 car 8/4 Log Run Soft Maple
1 car 6/4 1st & 2nd Red Birch	4/4 Common & Better Hard Maple
1 car 6/4 Common Plain Birch	4/4 No. 3 Common Hard Maple
2 cars 4/4 Common Plain Birch	6/4 Log Run Hard Maple
5 cars 4/4 Common Red Birch	

Our new stock is now fairly dry
SEND US YOUR INQUIRIES

ARPIN HARDWOOD LUMBER CO.
Grand Rapids, Wis., Atlanta, Wis.,
Saw mills and planing mill at Atlanta, Wis.

Brown Bros. Lumber Co.

Manufacturers
and Wholesalers

Rhineland, Wis.

1 " No. 1 Com. & Btr. Hard Maple
1 1/4" No. 2 Com. & Btr. Hard Maple
1 1/2" No. 2 Com. & Btr. Hard Maple
2 " No. 2 Com. & Btr. Hard Maple
1 1/4" No. 2 & Btr. Soft Elm

DRY STOCK
AND CAN
MAKE
PROMPT
SHIPMENT

We want to move the following air-seasoned stock

5 cars 6/4" No. 2 Com. & Better Birch
3 cars 5/4" No. 2 Com. & Better Birch
1 car 8/4" No. 2 Com. & Better Birch
1 car 8/4" No. 1 Com. & Better Birch
3 cars 4/4" No. 1 Com. Birch
2 cars 4/4" No. 2 Com. Birch

OELHAFEN LUMBER CO.
TOMAHAWK, WISCONSIN

GET OUR PRICES ON

1 car 1" No. 1 Common & Btr. Red Birch.
10 cars 1" No. 2 Common & Btr. Plain Birch.
5 cars 1" No. 1 and No. 2 Common Plain Birch.
2 cars 1 1/4" No. 2 Common & Btr. Plain Birch.
2 cars 1 1/2" No. 2 Common Plain Birch.

Can ship in straight or mixed cars with other lumber

ROBBINS LUMBER COMPANY
Rhineland, Wisconsin

89%

of HARDWOOD RECORD subscribers are owners of steam plants. Eighty-nine per cent are, therefore, buyers of wood-working machinery. There is little percentage of waste circulation in HARDWOOD RECORD for machinery advertisers.

BUFFALO

The Foremost Hardwood Market of the East

G. ELIAS & BRO. HARDWOODS

White Pine, Yellow Pine, Spruce,
Hemlock, Fir, Lumber, Timber, Mill-
work, Boxes, Maple and Oak Flooring

955-1015 ELK STREET

Hugh McLean Lumber Co.

OUR SPECIALTY:

QUARTERED WHITE OAK

940 ELK STREET

I. N. Stewart & Bro.

Specialties

Cherry and Oak

892 Elk Street

Standard Hardwood Lumber Co.

OAK, ASH and CHESTNUT

1075 Clinton Street

BUFFALO HARDWOOD LUMBER CO.

We want to buy for cash

OAK, ASH AND OTHER HARDWOODS

All grades and thicknesses.
Will receive and inspect stock at shipping point.
Branch yard, Memphis, Tenn.

940 Seneca Street, BUFFALO

T. SULLIVAN & CO.

SPECIALTIES:

Gray Elm, Brown Ash

Pacific Coast Fir and Spruce

2 ARTHUR STREET

ORSON E. YEAGER

SPECIALTIES:

Oak, Ash and Poplar

932 ELK STREET

ANTHONY MILLER

HARDWOODS OF ALL KINDS

893 EAGLE STREET

The above firms carry large and well assorted stocks of all kinds and grades of Hardwoods, and have every facility for filling and shipping orders promptly. They will be pleased to have your inquiries.

Vansant,

Manufacturers Old-Fashioned

5-8 and 4-4
in Wide Stock,
Specialty

Kitchen &

Soft
Yellow
Poplar

Company

Ashland, Kentucky

EASTERN REPRESENTATIVE, John L. Cochran
601 W. 115th Street, New York City

CHICAGO OFFICE, Steger Building
W. H. Matthias, Manager.

FLOORING

OAK — BEECH — MAPLE
KILN DRIED END MATCHED

TELEPHONE YOUR ORDER OR INQUIRY TO OUR SALESMEN—WE WILL PAY THE CHARGES
W. M. RITTER LUMBER CO., COLUMBUS, OHIO

W. H. White Company Boyne City Lumber Company

Mills and General Office: BOYNE CITY, MICH.

Sales Office: BUFFALO, N. Y.

WE OFFER

4/4 and 5/4 No. 2 common and better
Basswood

4/4 No. 2 common and better Brown
Ash

4/4 and 5/4 No. 2 common and better
Birch, strictly unselected for color

4/4 and 5/4 No. 1 and No. 2 common
Flooring Maple.

4/4, 5/4, 6/4, 8/4, 10/4, 12/4 and 16/4
Firsts and Seconds Maple

STOCK DRY—STANDARD GRADES—BEST
MANUFACTURE—CAR OR CARGO SHIPMENTS

YELLOW POPLAR

MANUFACTURERS OF BAND SAWED

POPLAR
QUARTERED OAK
PLAIN OAK
CHESTNUT
BASSWOOD



SPECIALTY
QUARTER SAWED
WHITE OAK

Coal Grove, Ohio, U. S. A.

LUMBER CO.

Aardwood Record

Eighteenth Year,
Semi-Monthly.

CHICAGO, NOVEMBER 10, 1912

{ Subscription \$2.
Single Copies, 10 Cents.

LARGEST VENEER PLANT IN THE WORLD

C. L. WILLEY

MANUFACTURER OF

MAHOGANY, VENEER

HARDWOOD LUMBER

OFFICE, FACTORY AND YARDS:

2558 South Robey Street

Telephone Canal 930

BAND MILLS, MEMPHIS, TENN.

CHICAGO

WANTED

All Kinds of High-Grade

HARDWOODS

S.E. SLAYMAKER & CO.

Representing
WEST VIRGINIA SPRUCE LUMBER CO.,
Cass. West Virginia.

Fifth Ave. Bldg.,
NEW YORK

The Burning Question of Fire Insurance

IS BEST ANSWERED BY THE ECONOMICAL AND RELIABLE TRADE MUTUALS



INDIANA LUMBERMEN'S MUTUAL INSURANCE CO. of Indianapolis, Ind.

LUMBERMEN'S MUTUAL INSURANCE CO. of Mansfield, Ohio

THE LUMBER MUTUAL FIRE INSURANCE CO. of Boston, Mass.

PENN. LUMBERMEN'S MUTUAL FIRE INSURANCE CO. of Philadelphia, Pa.

CENTRAL MANFRS. MUTUAL INSURANCE CO. of Van Wert, Ohio



Average rate of dividend to Policy Holders, now 36%

HOLLOWAY HARDWOOD LUMBER CO.

NOT INCORPORATED

20 W. Jackson Blvd., CHICAGO

SPECIAL ITEMS FOR IMMEDIATE SHIPMENT

INDIANA WHITE OAK

40,000 ft. 12/4 1st and 2nd
Plain White Oak, bone dry.
55,000 ft. 10/4 1st and 2nd
Plain White Oak, bone dry.
60,000 ft. 8/4 1st and 2nd
Plain White Oak, bone dry.
20,000 ft. 12/4 No. 1 Com.
Plain White Oak, bone dry.

65,000 ft. 8/4 No. 1 Com.
Plain White Oak, bone dry.
150,000 ft. 4/4 1st and 2nd
Plain White Oak, bone dry.
35,000 ft. 4/4 No. 1 Common
Plain White Oak, bone dry.
15,000 ft. 10/4 No. 1 Com.
Plain White Oak, bone dry.

100,000 ft. 2x6 & wider
Sound Com. White Oak.
SOFT ELM
3 cars 8/4 Common and
Better Soft Elm.
2 cars 12/4 Common and
Better Soft Elm.
50,000 ft. 5/4 Log Run Soft
Elm.

We have a good assortment of band sawn Cottonwood, Ash, Cypress, Sap Gum and plain and quartered Red Gum. Wire or write for prices for prompt shipment

Combined Chicago
Sales Office for

WILSON & COCHRAN

G. W. SIMS COMPANY

MARK H. BROWN

LUMBER COMPANY

HOWE LUMBER CO.

DAILY CAPACITY

Red Gum, 50,000 ft.
Cypress, 30,000 ft.
Oak, 40,000 ft.
Ash, 20,000 ft.
Cottonwood, 30,000
Miscellaneous,
15,000 ft.

Long-Knight Lumber Co.

Indianapolis, Indiana

HARDWOODS

OAK ASH GUM CYPRESS

1 Car 2" No. 2 Common Walnut.

1 Car 5/4 No. 1 Common Walnut.

1 Car 5/4 Common Walnut.

1 Car 2" 1st and 2ds Plain Red Oak.

40,000 ft. African Mahogany, 1" to 2".

PROCTOR VENEER DRYER FIREPROOF

—AN—
UNPARALLELED SUCCESS

No
Splitting
Nor
Checking
No
Clogging
Nor
Adjusting



Recom-
mended by
all those
who
have tried
it

THE PHILADELPHIA TEXTILE MACHINERY COMPANY

DEPT. L

HANCOCK & SOMERSET STS.

PHILA PA.

One Carload or a Dozen—

Either order will have such attention as will insure shipment on the date promised.

With nearly fifty shipping points we are often able to save considerable on the transportation, besides securing prompt delivery.

Besides, there is the satisfaction in knowing the **quality** and **price** are sure to be right.

**“Everything in Lumber—
Hardwood a Specialty”**

J. GIBSON McILVAIN & Co.
1420 Chestnut Street PHILADELPHIA

Take a Look at What The World is Doing

Include in your survey the timber field of the West. In the great out-of-doors on the Pacific Slope and Inter-mountain country are millions of acres of the finest timber that ever grew. It can be bought at low prices.

Your survey will show great fleets of cheaply operated steam schooners engaged in carrying lumber to the world's markets.

Broadening the scope of your vision you will see the builders of the Panama Canal are completing their work, the greatest engineering feat of history.

There is a connection between the forests of the west, the lumber carrying vessels, the Panama Canal and the world's lumber requirements.

Lumber is now being shipped from the Pacific Coast to the Atlantic Seaboard by rail, the freight charge being about \$20 a thousand feet. After the Canal has been completed and opened for traffic it can be carried at a cost of \$6 to \$8 a thousand feet and the voyage will not take any more time than the transcontinental rail trip.

The timber you buy during the next eighteen months will share in the great rise in value that will follow the completion of the Panama Canal.

Now is the time to repair previous neglect of western opportunity. We are convinced an investigation by you will be followed by an investment.

We will help you investigate.

JAMES D. LACEY & CO.

TIMBER LAND FACTORS

CHICAGO

PORTLAND

SEATTLE

MICHIGAN

FAMOUS FOR HARD MAPLE AND GREY ELM

Michigan Hardwoods

MANUFACTURED BY

COBBS & MITCHELL, Inc.

CADILLAC, MICH.

October 29th, 1912

DRY STOCK LIST

4/4 Ash No. 2 Common & Better.....	20 M
4/4 Basswood No. 1 Common.....	100 M
4/4 Cherry No. 3 Common & Better.....	9 M
4/4 Cadillac Gray Elm No. 1 Common.....	80 M
4/4 Cadillac Gray Elm No. 2 Common.....	60 M
6/4 Cadillac Gray Elm, No. 1 and 2 Common.....	20 M

"It is not what lumber costs you, so much as what you can get out of it, that decides its value for your work."

OUR OWN MANUFACTURE

W. D. YOUNG & CO.

MANUFACTURERS

FINEST MAPLE FLOORING

KILN DRIED, HOLLOW BACKED
MATCHED OR JOINTED
POLISHED AND BUNDLED

Hard Maple, Beech and Birch Lumber

1 TO 6 INCHES THICK WRITE FOR PRICES
BAY CITY, :: :: MICHIGAN

Something New For Your Factory Floors

Utility Joined With Economy

We are now manufacturing what we call a No. 2 Factory grade of Hardwood Flooring which can be used successfully in factory buildings where good wearing qualities rather than appearance are required. This Flooring is made from the hardest portion of the log, and while the Flooring shows the heart defect to a considerable extent, nevertheless it will wear with wonderful durability.

It is 13 16 x 2 1/4" face, and the Flooring is kiln dried, hollow backed, bored, end matched, steel scraped and bundled.

Write us about it. This is a grade of Hardwood Flooring you should know about. Address MITCHELL BROTHERS COMPANY, Sales Department, CADILLAC, MICHIGAN.

THE Kneeland-Bigelow Co.

300,000 Feet

5/4 No. 2 Common and Better Beech

HARDWOOD MANUFACTURERS

100,000 ft. 5/4 1st and 2nds Basswood
250,000 ft. 5/4 No. 1 Common Basswood

This is of good average widths and lengths, containing a large percentage of 16 ft.

All of the above stock is nicely manufactured, being hand sawed, trimmed, and well seasoned. We are prepared to quote attractive prices for this material for immediate shipment.

BAY CITY, MICH.

CHICAGO

THE GREATEST HARDWOOD MARKET IN THE WORLD

HUDDLESON-MARH LUMBER COMPANY

(Successors in Chicago to OTIS MANUFACTURING CO.)

2254 LUMBER STREET, CHICAGO

Mahogany Lumber

Mexican and Cuban. 1s
& 2s, No. 1 Com., Shorts.
All thicknesses. Plain and
Figured.

Mahogany Veneer

Mexican and African.
Sawed and sliced. All
thicknesses. Figured and
Plain.

Circassian Walnut Lumber and Veneer.

Qtd. R. & W. Oak Veneer Plain R. & W. Oak Veneer
BIRCH, GUM, POPLAR, AND BASSWOOD VENEER
ALL IN OUR CHICAGO YARD.
PROMPT SHIPMENT ASSURED.

J. RAYNER VENEERED PANELS

ALL WOODS

SEND FOR STOCK LIST

MAHOGANY LUMBER

CARROLL AVE. AND SHELDON ST.
CHICAGO

FLANNER-STEGER LAND & LUMBER CO. MAPLE AND BIRCH FLOORING

of unexcelled manufacture and quality. Also Manufacturers of Basswood, Birch, Elm, Maple and Hemlock.

SEND US YOUR INQUIRIES

MILLS:

BLACKWELL, WISCONSIN

GENERAL SALES OFFICE

1704 STEGER BLDG., CHICAGO, ILL.

HARDWOOD AND YELLOW PINE LUMBER

*In Stock, Ready
To Ship*

3 cars 1x6 and wider 1st & 2nd Cottonwood
3 cars 1x9 to 12" Cottonwood Box Boards
4 cars 1" No. 1 Common Cottonwood
4 cars 1" No. 1 Common Sap Gum

WE make
a spe-
cialty of Oak
Timber and
Car Stock.

WRITE US FOR PRICES ON YELLOW PINE TIMBER, FLOORING, CEILING AND FINISHING.
SCHULTZ, HOLLOWAY CO., 343 South Dearborn Street, CHICAGO

A floor to adore



For thirty-three years Wilce's Hardwood Floor-
ing has been among the foremost on the market
and because it stands today "unequaled" is the
best evidence that its manufacturer has kept
abreast of modern methods and the advanced de-
mands of the trade. To convince yourself of the
above statements, try our polished surface floor-
ing, tongued and grooved, hollow backed, with
matched ends and holes for blind nailing—you'll
find it reduces the expense of laying and polishing.

Our Booklet tells all about Hardwood Flooring
and how to care for it—also prices—and is free.

The T. Wilce Company

22nd and Throop Sts. CHICAGO, ILL.

Estabrook-Skeeel Lumber Co.

MANUFACTURERS AND DEALERS IN

**Maple, Birch, Elm, Basswood, Ash
And Other Northern Hardwoods**

In the Market for Round Lots of Hardwood

WRITE US BEFORE SELLING

Fisher Building, CHICAGO

*PHONE HARRISON 1984

500 Copies Sold Within a Week After Prospectus Was Issued

Hardwood Record announces the issue on January 1,
1913, of an Authoritative Commercial and Scientific Book

American Forest Trees

By Henry H. Gibson, Editor Hardwood Record
Edited by Hu Maxwell, Wood Utilization Expert

The Work Involves :

First: A botanical description of the more than 300 species of American forest tree growth.

Second: A physical description of the wood of these species.

Third: A recital of the chief uses of all important American woods, together with suggestions of advantageously broadening their uses.

Fourth: Complete information concerning the range of growth of all varieties.

Fifth: Related trees are logically grouped according to families and spe-

cies; important species covered in substantial detail, and brief mention of the woods of minor importance.

Sixth: Scientific name of each tree is recited, as well as the various common names by which it is recognized in different parts of its range of growth.

Seventh: The properties of the various woods are carefully analyzed, particularly weight, hardness, stiffness, strength, elasticity, toughness, color, figure, and seasoning and lasting properties.

¶ The book will contain between 650 and 750 pages, will be printed on the best quality of enameled paper, and handsomely bound in half leather, dark green roan back and corners, with basket cloth sides, silk head-bands, gold stamping on the back, and gilt top.

¶ The work will be illustrated with more than 100 full-page pictures on plate paper in sepia, outlined in orange, from photographs, covering all the chief commercial varieties of virgin forest timber growing in the United States; and also with numerous engravings, from drawings and photographs, showing leaf and flower forms, etc.

¶ The price of the work is \$6.00, delivered by express or mail, and is sold only on subscription.

¶ An order blank, and a prospectus, showing the character of the paper, size of page and style of printing will be forwarded on application.

Address Book Department, HARDWOOD RECORD

537 South Dearborn Street

Chicago, Illinois

ORDERS SHOULD BE PLACED AT ONCE

KNOXVILLE

Famous for Finest Type of Poplar, Oak and Chestnut

VESTAL LUMBER AND MANUFACTURING CO. KNOXVILLE, TENNESSEE.

QUARTERED WHITE OAK OUR SPECIALTY

MANUFACTURERS OF
QUARTERED WHITE OAK, PLAIN OAK, POPLAR, WALNUT & TENNESSEE RED CEDAR LUMBER
BAND MILLS AT VESTAL, A SUBURB OF KNOXVILLE. SOUTHERN AND LOUISVILLE & NASHVILLE RAILROAD

H. S. MIZNER,
Pres.

C. C. CANNON,
Vice-Pres.

J. M. LOGAN,
Gen'l Manager

C. R. SWANN,
Sec'y and Treas.

LOGAN-MAPHET LUMBER CO.

MANUFACTURERS AND WHOLESALE
HARDWOODS AND PINE
POPLAR A SPECIALTY

Main Office and Yards: Knoxville

Branch Office and Yard:

Bank and McLean Ave., Cincinnati I. M. ASHER, Mgr.

We Want Orders for the following Dry Stock:
WHITE OAK—Plain or Quartered.

RED OAK—Plain or Quartered.

CHESTNUT

BASSWOOD

POPLAR

WHITE PINE

Always carry large well
assorted stock of all
kinds of Hardwoods.

CAN SHIP ON SHORT NOTICE.

ED. MAPHET, Pres. and Mgr.

JAMES T. SHEA, Vice-Pres.

JOHN F. SHEA, Treas.

Maphet & Shea Lumber Co.

Manufacturers
and Wholesalers

OFFICE: 703-705 HENSON BUILDING

Yard: Middlebrook Pike and
Lonsdale Car Line

KNOXVILLE, TENN.

We manufacture: YELLOW POPLAR,
OAK, CHESTNUT, WHITE AND YEL-
LOW PINE, HEMLOCK BARK, ETC.

BAND AND CIRCULAR MILLS—EAST TENN.
MOUNTAIN VIRGIN HARDWOOD STUMPAGE

"THE VERY BEST"

Veneers in Any Wood

ASH, GUM

CHESTNUT

WHITE OAK

RED OAK

PINE, POPLAR

WALNUT

Knoxville Veneer Co.

P. B. RAYMOND, General Manager, Knoxville, Tenn.

Kimball & Kopcke Knoxville, Tennessee

Manufacturers and Shippers of

Appalachian Hardwoods
OAK OUR SPECIALTY

NASHVILLE

CELEBRATED FOR HIGHEST TYPE TIMBER GROWTH, FAULTLESS
MANUFACTURE AND GOOD GRADES.

If you want to get in touch with 2000 Live Wire Buyers of Hardwoods

it will pay you to find out about
the Hardwood Record's

BULLETIN SERVICE

One man, who uses the service
gives it credit for earning annu-
ally \$10,000 for him.

Write for pamphlet—

"Selling Lumber By Mail"

It will prove a revelation to you.

HARDWOOD RECORD

(Bulletin Dept.)

537 So. Dearborn St.,
CHICAGO

We will name very attractive
prices on a few cars of each of the
following items:

4 4, 6/4, 10/4 and 12/4 1s and 2s Poplar.
4 4 and 8/4 Sap Poplar.
1 1/4", 1 1/2" and 2 1/2" No. 1 Common Poplar.
4/4 No. 1 and Panel Poplar in widths of 12 to 17", 18 to 23"
and 24" and up.
4 4 x 13 to 17" Poplar Box Boards.
4/4 1s & 2s Basswood or Linn—very fine.
3/8, 4/4, 5/4, 10/4 and 12/4 1s & 2s Qtd. W. Oak.
4/4, 5/4, 6/4 and 8/4 No. 1 Common Qtd. W. Oak.
6/4 1s & 2s Qtd. R. Oak.
4/4, 5/4 and 6/4 No. 1 Common Qtd. R. Oak.
6/4 and 10/4 1s & 2s Hickory.
4/4, 6/4, 10/4 and 12/4 No. 1 Common Hickory.
4/4, 6/4, 8/4, 10/4 and 12/4 No. 2 Common Hickory.
4/4 1s & 2s Chestnut, also 5, 6 and 8/4.
4/4 No. 1 Common Chestnut.

John B. Ransom & Co.

MANUFACTURERS OF

Hardwood Lumber

Nashville, Tenn.

IF YOU BUY LUMBER

Naturally you want only well manufactured stock, clean
grades and prompt service. We can give you all three.

We have a well assorted stock of **Plain and
Quartered Red and White Oak, Poplar, Ash,
Chestnut, Hickory and Aromatic Tennessee
Red Cedar**, practically all of which is our
own manufacture.

LOVE, BOYD & CO., Nashville, Tenn.

Cherokee Lumber Co.

Manufacturers of all the lumber we sell.

Let us quote you some attractive prices
on quartered white oak and poplar.
Any grades and thicknesses.

NASHVILLE, TENN.

**The Gibson Aluminum Tally Book Cover
and Tally Tickets** are now employed by
more than 2,000 lumber manufacturers,
dealers and consumers.

Tennessee Hardwoods

**Tennessee Hardwood
Lumber Co.**

West Nashville

ARKANSAS SOFT YELLOW CYPRESS

250,000 FEET

4-4 in. 1sts & 2nds	5-4 in. 1sts & 2nds	8-4 in. 1sts & 2nds
4-4 in. Selects	5-4 in. Selects	8-4 in. Selects
4-4 in. No. 1 Shop	5-4 in. No. 1 Shop	8-4 in. No. 1 Shop

BAND SAWN—TRIMMED GOOD WIDTHS AND LENGTHS—STRAIGHT OR MIXED CARS

PAEPCKE LEIGHT LUMBER COMPANY, GENERAL OFFICES, CHICAGO, ILLINOIS

LAMB-FISH LUMBER CO.



Band Mill and General Offices
CHARLESTON, MISS.
THE LARGEST HARDWOOD MILL IN THE WORLD
ANNUAL CAPACITY, 40,000,000
STOCK LIST—Dry Lumber on Hand November 1, 1912

TELEGRAPH
CODES
UNIVERSAL
HARDWOOD
WESTERN UNION
Cable Address, Lamb

	3/8	1/2	5/8	3/4	4/4	5/4	6/4	8/4	10/4	12/4	16/4
FAS Qrtd. White Oak 6" & up.....	6,000	60,000	20,000	40,000	30,000	.....	7,000	.....	.....	.....	.....
No. 1 Com. Qrtd. White Oak 4" & up.....	.....	12,000	.....	12,000	140,000	.....	.....	.....	.....	.....	.....
No. 2 Com. Qrtd. White Oak.....	.....	5,000	.....	.....	.....	.....	.....	.....	.....	.....	.....
FAS Plain White Oak 6" & up.....	30,000	120,000	140,000	80,000	.....	40,000	.....	4,000	3,000	.....	2,000
FAS Plain White Oak 12" & up.....	.....	.....	.....	4,000	.....	.....	.....	.....	.....	.....	.....
No. 1 Com. Plain White Oak 4" & up.....	.....	18,000	40,000	10,000	100,000	5,000	.....	.....	9,000	.....	.....
FAS Plain Red Oak 6" & up.....	.....	.....	.....	20,000	150,000	.....	.....	.....	.....	.....	1,000
No. 1 Com. Plain Red Oak 4" & up.....	.....	.....	15,000	25,000	.....	.....	18,000	1,000	.....	.....	.....
FAS Red Gum.....	200,000	150,000	110,000	250,000	220,000	40,000	70,000	40,000	.....	3,000	.....
FAS Quartered Red Gum.....	.....	.....	.....	.....	.....	.....	.....	3,000	.....	.....	.....
FAS Circassian Red Gum.....	.....	.....	.....	12,000	40,000	.....	3,000	1,000	.....	.....	.....
No. 1 Com. Red Gum.....	60,000	20,000	130,000	40,000	.....	50,000	.....	5,000	.....	.....	.....
FAS Sap Gum 18" & up.....	.....	.....	.....	.....	100,000	.....	.....	.....	.....	.....	.....
FAS Sap Gum Reg. W. & L.....	50,000	40,000	20,000	.....	.....	15,000	10,000	15,000	.....	.....	.....
No. 1 Com. Sap Gum.....	.....	.....	100,000	.....	190,000	.....	.....	.....	.....	.....	.....
No. 2 Com. Sap Gum.....	50,000	35,000	25,000	.....	.....	200,000	.....	.....	.....	.....	.....
Shop & Better Cypress.....	.....	.....	.....	.....	.....	.....	.....	50,000	.....	.....	.....
No. 1 Com. Cypress.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Log Run Elm.....	.....	.....	.....	.....	.....	.....	20,000	20,000	.....	.....	.....
Common & Better Tupelo.....	.....	.....	.....	.....	40,000	.....	.....	.....	.....	.....	.....

OUR LUMBER CONTAINS ALL WIDE STOCK PRODUCED IN MANUFACTURING AND WILL RUN OVER 50% OF 14 AND 16 FT. LENGTHS. WE ALSO MANUFACTURE OAK TIMBERS AND BRIDGE PLANK—FACILITIES FOR KILN DRYING AND DRESSING

"STEARNS" QUALITY LUDINGTON

HARDWOOD SPECIALISTS

OUR WINTER SUPPLY OF DRY

THICK HARD MAPLE

is now ready for the market. We have a nice assortment of 1 $\frac{1}{4}$ ", 1 $\frac{1}{2}$ ", 2", 3" and 4".

Quotations will be given cheerfully

The **STEARNS**
SALT & LUMBER CO. LUDINGTON, MICH.

BAND SAWN HARDWOODS

WE PRODUCE OUR OWN STOCKS

OAK—Plain and Quartered, Red and White

COTTONWOOD—Ash, Southern Elm, Gum, Soft Maple

A FEW ITEMS WE WANT TO MOVE:

100,000 feet 5/4" x 13" to 17" 1sts & 2nds Cottonwood.
110,000 feet 4/4" x 22" & up No. 1 & Panel Cottonwood.
200,000 feet 4/4" x 13" to 17" Cottonwood Box Boards.
75,000 feet 4/4" 1sts & 2nds Quartered White Oak.
97,000 feet 4/4" No. 1 Common Quartered White Oak.
115,000 feet 4/4" 1sts & 2nds Red Gum.
200,000 feet 4/4" to 8/4" No. 1 Shop & Better Cypress.

WRITE US FOR PRICES

ANDERSON-TULLY COMPANY
HARDWOOD LUMBER **Memphis, Tenn.**

WEST VIRGINIA

WHERE THE BEST HARDWOODS GROW



CHARLESTON, W. VA.

30,000 ft 4/4 Clear Saps Poplar.
 50,000 ft. 4/4 No. 1 Common & Selects Poplar.
 100,000 ft. 4/4 No. 2 "A" Common Poplar.
 50,000 ft. 5/4 No. 1 Common Poplar.
 50,000 ft. 6/4 No. 1 Common Poplar.
 15,000 ft. 4/4 x 13-17" Poplar Box Boards.
 17,000 ft. 4/4 x 9-12" Poplar Box Boards.
 15,000 ft. 4/4 x 24 and up Panel & Wide Poplar.

20,000 ft. 6/4 No. 1 Common & Better Chestnut.
 15,000 ft. 5/4 Log Run Basswood.
 90,000 ft. 4/4 1sts & 2nds Red Gum.
 75,000 ft. 4/4 No. 1 Common Red Gum.
 50,000 ft. 4/4 1sts & 2nds Sap Gum.
 60,000 ft. 4/4 Selects & Better Cypress.
 50,000 ft. 4/4 No. 1 Common & Shop Cypress.
 40,000 ft. 4/4 No. 2 Common Cypress.
 25,000 ft. 8/4 No. 2 Common & Pecky Cypress.

Peytona Lumber Company Inc.

WHOLESALE MANUFACTURERS

HARDWOOD LUMBER

HUNTINGTON, W. VA.

Yellow Poplar, Basswood, Chestnut, Oak, Ash

BAND MILL AND YARDS,
1st Ave. and 20th to 24th Sts.

10 cars 4/4 Select & No. 1 Com. Poplar (50% Selects,
60% 14' & 16' long).
 4 cars 4/4 13" to 17" Poplar Box Boards (75% 14' &
16').
 2 cars 4/4 No. 1 Panel Poplar, 18" to 23" (60% 14'
& 16').
 1 car 4/4 No. 1 Panel Poplar, 24" & up (60% 14' & 16').

All high-grade band sawn stock. Good widths.

DRY STOCK

1 car 10, 12 & 16/4 C & B Plain OAK.	2 cars 6/4 No. 1 Com. POPLAR.
3 cars 4/4 No. 1 Com. Plain OAK.	3 cars 4/4 Log Run BASSWOOD.
2 cars 4/4 No. 2 Com. Plain OAK.	2 cars 4/4 Log Run BUCKEYE.
1 car 4/4 1s & 2s POPLAR.	1 car 8/4 Log Run MAPLE.
1 car 4/4 Sap POPLAR.	1 car 4/4 No. 1 C & B MAPLE.
3 cars 4/4 No. 1 Com. POPLAR.	1 car 5/4 C & B CHESTNUT.

Send Us Your Inquiries

Boice Lumber Co., Inc.

RICHMOND, VIRGINIA

WE MANUFACTURE AND
DEAL IN

TIES, HARDWOOD LUMBER AND TIMBER

We want to buy a large
amount of 4/4, 8'—8'6"
Oak from Tie Sides

Hill Bros. Tie & Lumber Company
Charleston, W. Va.

Put the Hardwood Club On Your Mailing List

When you are in a hurry to get lumber, and want it just right as to price, grade and other features, don't waste time and effort sending out a big batch of inquiries to dozens of firms; make sure of getting quick action by letting the Louisville Hardwood Club handle it.

When you ask for quotations from the club, you get prices from all its individual members who handle that particular kind of stock, thus assuring yourself of receiving offers from everybody in this, the leading market of the Hardwood Belt, who is in a position to supply your wants.

Of special items, which a single firm may have trouble in quoting on, you can always get a car or two in Louisville, for by our co-operative service the stocks of various members may be drawn on to make up the necessary quantity of lumber. It is handled through one house, however, thus making the transaction simple and convenient for you.

There are a lot of points about Hardwood Club service that it would pay you to find out about. Don't be too bashful to let us know when you are in the market.

The Louisville Hardwood Club

NORMAN LUMBER COMPANY
Mill at Holly Ridge, La.

OHIO RIVER SAWMILL COMPANY

BOOKER-CECIL COMPANY

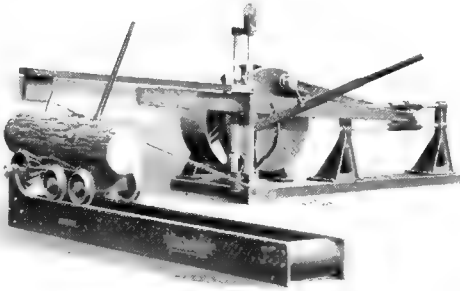
W. P. BROWN & SONS LUMBER COMPANY

THE LOUISVILLE VENEER MILLS

LOUISVILLE POINT LUMBER COMPANY

C. C. MENGEL & BRO. CO.

EDWARD L. DAVIS LUMBER COMPANY



No. 1 Improved Drag Sawing Machine

machine on the market today. This, in itself, proves that DEFIANCE machines are what their advertising claims them to be. From our advertising in its very incipency we claimed them to produce results at a lower cost of production, to turn out clean, smooth work, and no waste of raw material, to cause less trouble to their operators, and to cost less in proportion to their actual worth than all kindred tools.

**ECONOMY IN PRODUCTION
MEANS INCREASED PROFITS**

We are ready to stand by all our advertised claims and have done so for all these years. That's why DEFIANCE machines are found wherever wood is worked.

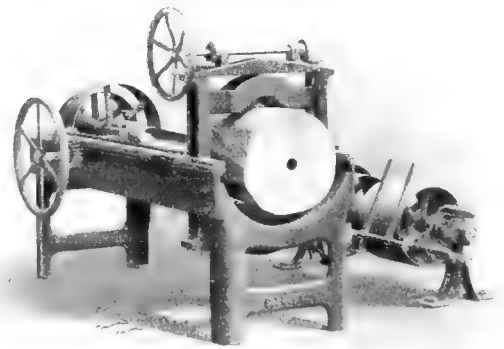
Write us TODAY for catalog and prices

THE DEFIANCE MACHINE WORKS
414 PERRY ST. DEFIANCE, OHIO

"THE IMPRINT OF SATISFACTION"

Improvement, the Order of the Age "DEFIANCE" Wood-Working Machines

have been before the manufacturing public for over sixty years. During that time they have been advertised more extensively than any other



No. 1 Heavy Hub Boring Machine

ESTABLISHED 1869

**Adams & Raymond
Veneer Co.**

INDIANAPOLIS, INDIANA
MANUFACTURERS
OF
PLAIN & FIGURED
VENEERS

CIRCASSIAN } WALNUT
AMERICAN }

QUARTERED OAK

ANY THICKNESS



Going up—Hardwood Timber

We have the following hardwood and pine timber for sale at prices that have not as yet been advanced with the rise in value on timber lands. For a short time we offer—

150,000,000 FEET HARDWOOD IN SOUTHEAST ARKANSAS — A SPLENDID OPPORTUNITY.

7,600,000 FEET OF HARDWOOD IN SOUTHWEST ARKANSAS

We also have timber in British Columbia and on the Pacific Coast and Oregon.

For further particulars, address

John C. Spry

Room 1230 Corn Exchange Bank Bldg., Chicago, Illinois

SAVE YOUR MONEY BY USING THE

RED BOOK Published Semi-annually
in February and August

It contains a carefully prepared list of the buyers of lumber in car lots, both among the dealers and manufacturers.

The book indicates their financial standing and manner of meeting obligations. Covers the United States, Alberta, Manitoba and Saskatchewan. The trade recognizes this book as the authority on the lines it covers.

A well organized Collection Department is also operated and the same is open to you. Write for terms.

Lumbermen's Credit Assn., ESTABLISHED 1878

608 So. Dearborn St.
CHICAGO

Mention This Paper.

116 Nassau Street
NEW YORK CITY

CINCINNATI

THE GATEWAY OF THE SOUTH

Why Is Cincinnati? The Leading Veneer Market •

SEE THE ADVERTISERS ON THIS PAGE, AND YOU WILL KNOW

ACME VENEER & LUMBER COMPANY CINCINNATI OHIO

Our mill is now cutting what is said to be the **LARGEST VIRGIN WHITE OAK** timber in Ohio. It is of soft, brashy texture from the best White Oak Section.

Our new line of Circassian is ready for the market.

Do not overlook us when in the market for

MAHOGANY

CURLY BIRCH

ROSEWOOD

OR ANY KIND OF PLAIN VENEER

We make a specialty in all woods of 1/8, 3/16 and 1/4 thicknesses for Interior Finish and Door Work.

OHIO VENEER COMPANY

OFFICE AND MILLS:

**2624-2634 Colerain Avenue
CINCINNATI OHIO**

WE OFFER THE FOLLOWING VENEER FOR SALE:

600,000 ft. 1/28" Cut Circassian Walnut Veneer
1,500,000 ft. 1/28" Slice Cut Figured African Mahogany Veneer
100,000 ft. 1/24" Slice Cut Figured African Mahogany Veneer
125,000 ft. 1/20" Sawed Mexican Mahogany Veneer
200,000 ft. 1/20" Sawed Quartered White Oak Veneer
280,000 ft. 1/20" Slice Cut Quartered White Oak Veneer
150,000 ft. 1/28" Slice Cut Quartered White Oak Veneer
350,000 ft. 1/28" Slice Cut Figured Gum Veneer
50,000 ft. 1/28" Slice Cut Quartered Sycamore
600,000 ft. Slice Cut African Mahogany Crotch Veneer
70,000 ft. Cut Bird-Eye Maple Veneer

C If you are not a subscriber to **HARDWOOD RECORD** and have a suspicion that you would like to see a copy, it is yours for the asking.

**The Maley, Thompson
& Moffett Co.**

**Veneers, Mahogany and
Hardwood Lumber**

Largest Stocks

Best Selections

CINCINNATI, OHIO

CINCINNATI

THE GATEWAY OF THE SOUTH

FOR QUICK SHIPMENT

5 cars 4 1/4" Sap & Sel. Poplar.
 5 cars 6 1/4" No. 1 Common
 Poplar.
 4 cars 4 1/4" 1s & 2s Plain
 White Oak.
 4 cars 5 1/4" 1s & 2s Plain
 White Oak.
 1 car 6 1/4" 1s & 2s Plain
 White Oak.

5 cars 4 1/4" No. 1 Com. Plain
 White Oak.
 4 cars 5 1/4" No. 1 Com. Plain
 White Oak.
 2 cars 6 1/4" No. 1 Com. Plain
 White Oak.
 1 car 8 1/4" No. 1 Com. Plain
 White Oak.

All the above stock Thoroughly Dry, Band Sawn and Equalized

GET OUR PRICES

KENTUCKY LUMBER COMPANY
 CINCINNATI, OHIO

W. E. HEYSER, President WEAVER HASS, V. President
 BENJAMIN BRAMLAGE, Sec'y & Treas.

The W. E. Heyser Lumber Company

MAIN OFFICE & YARDS
 Winton Place
 Cincinnati, Ohio

BRANCH YARDS AND MILLS
 West Virginia, Mississippi, Arkansas & Kentucky

12,000,000 ft. High Shipments made
 Grade West Vir- direct from our
 ginia and Southern own yards and
 Hardwoods in mills in straight or
 stock at all times. mixed cars.

SEND US YOUR INQUIRIES

L. W. RADINA & CO.

DEALERS IN

**POPLAR AND
 HARDWOODS**

CINCINNATI : : OHIO

WE WANT TO BUY

1", 1 1/4", 1 1/2" 1s & 2s AND NO. 1 COMMON SAP GUM
 1", 1 1/2" & 2" 1s & 2s AND NO. 1 COMMON RED GUM
 1" NO. 1 COMMON TUPELO.

SUBMIT US YOUR STOCK SHEETS
 WITH BEST CASH PRICES

DUHLMEIER BROS.
 CINCINNATI, OHIO

CINCINNATI

THE GATEWAY OF THE SOUTH

"EXTRA DRY"

100,000 5/4 No. 1 Common Plain Red Oak
100,000 4/4 1sts & 2nds Quar. White Oak
75,000 4/4 1sts & 2nds Plain Red Oak
60,000 4/4 1sts & 2nds Chestnut

FOR QUICK SHIPMENT FROM CINCINNATI
Write, Wire or Phone Orders or Inquiries

THE M. B. FARRIN LUMBER CO.
CINCINNATI, OHIO

E. C. Bradley Lumber Co.

705-706 Gerke Building, Cincinnati, Ohio

20,000' 4/4 1's & 2's Cherry. 4 cars 3" No. 1 Common & Better Hard Maple.
15,000' 4" No. 1 Common & Better Hard Maple. 6 cars 4/4 Log Run Hard Maple.
6 cars 4/4 No. 2 Common Hard Maple.

ABOVE IS ALL WEST VIRGINIA STOCK.

2 cars 4/4 1's & 2's Yel. Poplar. 1 car 4/4 No. 1 Panel Poplar 24" & up.
1 car 3" No. 1 Common & Better Yellow Poplar. 2 cars 4/4 Log Run Beech.
2,000' 4" No. 1 Common & Better Yellow Poplar. 10,000' 4/4 Log Run Cherry.
1 car 8/4 No. 2 Com. Buckeye. 2,500' 5/4 No. 1 Common & Better Cherry.

All of the above is band sawed, good widths and lengths, and we can make prompt shipment

BENNETT & WITTE

JUST A FEW OF OUR SPECIALS

1 car 4/4" No. 1 & Panel Sap Gum, 21" to 25". 2 cars 4/4" 1 & 2 Red Gum, 18" to 27".
3 cars 4/4 No. 1 Com. Qrtd. Red Oak. 2 cars 4/4 1 & 2 Pl. Red Oak, 12" & up.
1 car 4/4 No. 1 Com. Qrtd. White Oak. 1 car 12/4 1 & 2 Pl. White Oak.
2 cars 4/4" Sd. Wrmy. & No. 2 Com. Qrtd. Chestnut. 3 cars 4/4 1 & 2 Poplar.
1 car each 12/4" No. 1 Com. Selects & 1 & 2 Poplar. 1 car each 4/4 No. 1 Com. & 1st & 2nds Ash.
1 car 4/4, 5/4 & 6/4 1 & 2 Ash, 12" & up wide. 1 car 8/4, 10/4, 12/4 & 16/4" 1 & 2 Ash, 12" & up wide.

Main Office CINCINNATI, OHIO 222 W. 4th Ave. SOUTHERN OFFICE, MEMPHIS, TENN. EXPORT OFFICE, NEW ORLEANS, LA.

MOWBRAY & ROBINSON

SPECIALISTS IN

OAK-ASH-POPLAR

ALWAYS IN THE MARKET FOR
ROUND LOTS OR MILL CUTS

OFFICE AND YARDS SIXTH ST., BELOW HARRIET CINCINNATI

CHERRY
50 M ft. 4/4
No. 3
Common

CHESTNUT
100,000 feet
of 8/4 Sound
Wormy and
No. 2 Com-
mon.

WE HAVE IT
W. W. DEMPSEY

Manufacturer and
Wholesaler of

HARDWOODS

BAND SAWED STOCK

A LINE BRINGS PRICE BY RETURN MAIL

General Offices Johnstown, Pa. New York Office No. 18 Broadway

CYPRESS
250,000 feet
of 4/4 No. 1
Common &
Better, Old
grading.

SPRUCE
4/4 and 8/4
Clear and
Select, 8/4
Box and Mill
Cull

"Three Mills in Indiana" Used to Be the
Slogan. Now There's Only One Left, but It's

The Largest Band Mill in Indiana

"From Toothpicks to
Timbers 60 Feet Long"

PERRINE-ARMSTRONG COMPANY

Fort Wayne, Indiana

ANY REASONABLE OFFER

QUARTERED WHITE OAK

5,830' 3/4" 1s-2s.
10,500' 5/4" 1s-2s.
10,800' 6/4" 1s-2s.
8,000' 3/4" No. 1 Com.
20,000' 4/4" No. 1 Com., 10" & up.
57,000' 5/4" No. 1 Com.
4,080' 6/4" No. 1 Com.

45,000' 4/4" No. 2 Common.
5,390' 5/4" No. 2 Common.

PLAIN RED OAK

21,000' 4/4" No. 2 Com. Red and White.

QUARTERED RED OAK

21,000' 4/4" 1s-2s 6" & 7" wide.
10,300' 6/4" No. 1 Com.

WILL BUY THE FOLLOWING STOCK:
DRY—IN FINE CONDITION

PLAIN POPLAR

5,000' 4/4" 1s-2s Yellow, 7" & up.
30,000' 6/4" No. 1 Common.
12,000' 4/4" Clear Saps.
21,000' 6/4" Clear Saps.

QUARTERED POPLAR

16,900' 4/4" 1s-2s.
8,000' 4/4" No. 1 Common.

We, of course, have a complete stock of Quartered and Plain Oak, Poplar and Hickory, etc., in all grades and thicknesses, and will be glad to have your inquiries for anything you may need.

J. V. STIMSON & CO.

OWENSBORO, KY.

THE EAST

BOSTON

NEW YORK

PHILADELPHIA

WM. WHITMER & SONS

INCORPORATED

Manufacturers and Wholesale-
sellers of All Kinds of"If Anybody Can,
We Can"

HARDWOODS

West Virginia Spruce and Hemlock
Long and Short Leaf Pine Virginia Framing

Franklin Bank Bldg.

PHILADELPHIA

Willson Bros. Lumber Co.

MANUFACTURERS

WEST VIRGINIA HARDWOODS

Oliver Building

PITTSBURG, PA.

We Know How to fill your orders for all kinds of HARD-
WOODS, WHITE PINE, YELLOW PINE,
SPRUCE, HEMLOCK, CYPRESS, HARDWOOD FLOORING.
*Give us a trial.*THOMAS E. COALE LUMBER COMPANY
FRANKLIN BANK BUILDING, PHILADELPHIA, PA.

WM. E. LITCHFIELD

MASON BUILDING, BOSTON, MASS.

Specialist in Hardwoods

Manufacturers are requested to supply lists of stock for sale

PROMPT SHIPMENT

1 car 4/4 No. 1 Com. and Saps Poplar.
2 cars 4/4 No. 2 Com. & Better Hard Maple.
2 cars 8/4 Log Run M. C. O. Soft White Pine.
2 cars 5/4 Log Run M. C. O. Basswood.

DANIEL B. CURLL, Real Estate Trust Bldg., PHILADELPHIA

JONES HARDWOOD COMPANY

WHOLESALE DEALERS IN

HARDWOODS—Poplar and Gum

33 Broad Street,

BOSTON, MASS.

BEECHER & BARR

OAK CHESTNUT POPLAR

WHITE PINE, YELLOW PINE AND HEMLOCK
INTERIOR TRIM, HARDWOOD FLOORING.

442 LAND TITLE BLDG.

PHILADELPHIA, PA.

Saw Mills Designed and Built

Plans and specifications prepared. Construction supervised.
First class heavy millwright work. Entire plants surveyed. Ma-
chinery for complete mills. Fire loss adjustments. Practical
sawmill engineer. Can save you money. Highest testimonials.

C. M. STEINMETZ,

P. O. Box 83, Washington, D. C.

CHAS. K. PARRY & CO.

Hardwood Lumber

LAND TITLE BUILDING, PHILADELPHIA, PENNSYLVANIA

WEWANT 5/4 No. 1 common Red Oak 8/4 No. 1 common Red Oak
4/4 No. 2 common Red Oak Log Run Basswood

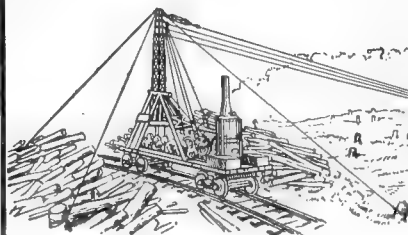
CHARLES HOLYOKE

141 MILK STREET, BOSTON, MASS.

HARDWOODS

The CHEAPEST HARDWOOD LOGGING IS DONE WITH

LIDGERWOOD CABLEWAY SKIDDERS

LIDGERWOOD MFG. CO.
96 Liberty Street, New YorkBranch Offices
CHICAGO, SEATTLE
Agencies
NEW ORLEANS—WOODWARD, WIGHT & CO. LTD.
CANADA—ALLIS CHALMERS BULLOCK LTD.
MONTREAL VANCOUVER

THE EAST

LEADING MANUFACTURERS AND JOBBERS

ASH
4/4, 5/4, 6/4,
8/4, 10/4, 12/4
and 14/4.

**AMERICAN
LUMBER & MFG. COMPANY**
Manufacturers and Wholesalers
PITTSBURGH, PA.

POPLAR
4/4 Bay Poplar
(Tupelo 1st and
2nds)

MAPLE
4/4, 5/4, 6/4,
8/4, 10/4, 12/4
and 16/4.

HARDWOOD
White and Yellow Pine

OAK
White and Red,
Quartered and
plain sawed, all
grades and
thicknesses.

YELLOW
POPLAR
All grades and
thicknesses.

We make a specialty of thick
White Ash, Hard Maple and White
Oak.
Railroad Car and Construction Oak
timbers, long lengths and special
sizes.

CHESTNUT
All grades and
thicknesses.

Write for prices before heavy call
for Spring requirements.

SPRUCE
All grades and
thicknesses.

HARD MAPLE

When the quality of being hard is required in Maple, Vermont or Adirondack stock should be specified. Maple will not grow harder for us than other people, but it certainly does grow harder in this section of the country than elsewhere.

WE CAN MAKE PROMPT SHIPMENTS.

GEO. WEBSTER LUMBER CO.
21 Besse Place, Springfield, Mass.

New York Office
25 West 42nd St.

H. D. WIGGIN 89 STATE STREET
BOSTON, MASS.
MANUFACTURER HARDWOOD LUMBER
Circular-sawed Poplar, Oak, Chestnut, Basswood, Maple
Mill at Stone Coal Junction, West Virginia

**Immediate
Shipment**

5 cars 4/4 No. 1 Common Yellow Poplar
4 cars 4/4 No. 1 Common Oak
DRY—Good lengths and widths

J. S. KENT CO., PHILADELPHIA

PALMER & PARKER CO.
TEAK MAHOGANY EBONY
ENGLISH OAK DOMESTIC
CIRCASSIAN WALNUT VENEERS HARDWOODS
103 Medford Street, Charlestown Dist.
BOSTON, MASS.

D. B. MacLaren Lumber Co.
HARDWOOD LUMBER

Evansville, Ind.

WISTAR, UNDERHILL & NIXON
REAL ESTATE TRUST BUILDING, PHILADELPHIA, PA.
QUARTERED WHITE OAK
NICE FLAKY STUFF

5 cars 4/4 No. 1 common Quartered White Oak
4 cars 4/4 No. 1 common Plain Red Oak
2 cars 4/4 No. 2 common Plain Red Oak
1 car 4/4 No. 1 common Poplar
1 car 4/4 Nos. 1 and 2 Red Gum

R.E. Wood Lumber Company

☞ Manufacturers of Yellow Poplar, Oak, Chestnut, Hemlock and White Pine.

☞ We own our own stumpage and operate our own mills.

☞ Correspondence solicited and inquiries promptly answered.

**GENERAL OFFICES:
CONTINENTAL BUILDING.**

Baltimore, Maryland

YOU pay a *little* more for our hardwood lumber than you do for many others, but it's worth *much* more.

With our modern and first-class equipment and expert operatives, we couldn't make bad lumber if we tried to, because the *quality* and *size* of our virgin tough mountain white ash, red birch, yellow poplar, buckeye, maple, red oak, cherry and basswood, averaging less than three logs to the thousand, and 95 per cent sixteen feet, is the best type of hardwood timber growth in the United States, and shows a larger percentage of *firsts*.

If you are a discriminating buyer let's get acquainted.

LITTLE RIVER LUMBER COMPANY,

Townsend, Tenn.

Dry Poplar
for
Immediate
Shipment

2 cars 4/4 Fas.
2 " 4/4 Saps, Selects.
3 " 4/4 No. 1 Common.
3 " 6/4 No. 2 Common.
1 " 8/4 Fas.
2 " 8/4 Saps, Selects.
5 " 8/4 No. 1 Common.
4 " 8/4 No. 2 Common.
2 " 10/4 No. 1 Common.

FAUST BROTHERS LUMBER COMPANY

Sales Office
1319 Fisher Bldg., CHICAGO

Main Office
PADUCAH, KENTUCKY

FREIGHT OVERCHARGES

WE SPECIALIZE ON LUMBER TRAFFIC
We represent nearly every member of The Mississippi Pine Association

Our overcharge claims for one company, \$6,000.00

Let us analyze your freight accounts
Collect past and prevent future overcharges
Best references from Lumbermen from
Canada to Mexico

COST BASED ON RESULTS

Write for particulars and terms.

The American Freight Audit & Storage Co.

Incorporated
Rooms 55-B, 39 West Adams St.

Chicago

**FIRE
INSURANCE**

Lumber Underwriters

66 BROADWAY
NEW YORK

A. F. PERRY, Manager.

Panel and No. 1 Poplar

5 cars 4/4" 18/23"

5 cars 4/4" 24" and up

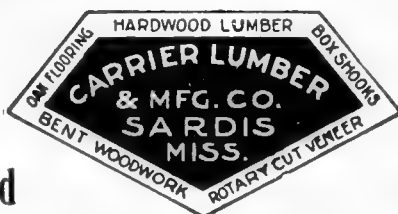
Let Us Have Your Inquiries

RUSSE & BURGESS, Inc.

Memphis, Tennessee

OAK FLOORING

**Kiln-
Dried
Polished**



**Hollow
Backed
and
Bundled**

89%

of **HARDWOOD RECORD** subscribers are owners of steam plants. Eighty-nine per cent are, therefore, buyers of wood-working machinery. There is little percentage of waste circulation in **HARDWOOD RECORD** for machinery advertisers.



Hardwood Record



Published in the Interest of the American Hardwood Forests, the Products thereof, and Logging, Saw Mill and Wood-working Machinery, on the 10th and 25th of each Month, by

THE HARDWOOD COMPANY

Henry H. Gibson, President
Burdie Anderson, Sec'y and Treas.

Entire Seventh Floor Ellsworth Building
537 So. Dearborn Street, CHICAGO

Vol. XXXV

CHICAGO, NOVEMBER 10, 1912

No. 2



Review and Outlook



General Market Conditions

Trading in hardwoods the country over goes on with great activity. Any variety of lumber or anything of desirable manufacture and dress finds a ready market at a highly satisfactory valuation. About the only two items that manifest any weakness, and this not seriously so, are firsts and seconds red and sap gum and No. 1 common and better poplar. Practically every other item is scarce and strong.

The car shortage is the one serious thing that militates against a highly satisfactory state of affairs in the entire range of the hardwood business. Several of the southern lines have absolutely refused the use of box cars for lumber shipments, and are unable to supply flats and gondolas in sufficient quantities to move half the stock offered. It is anticipated there will be a relief from the car shortage pretty soon, but until this obtains, difficulty will be encountered in making deliveries.

Plain oak of all grades continues to be the scarcest item in all trade centers of the country, and very substantial advances for desirable lots are being asked and obtained.

Nearly all the northern hardwoods in shipping condition are pretty well out of the market. The same situation obtains with a good many varieties of southern hardwoods.

The veneer and imported wood business is active and quite a number of plants are running overtime to take care of their business. Prices are fairly satisfactory, but comparatively are still much lower than lumber values.

Mahogany lumber of all varieties is remarkably scarce and in active demand, and high-class Cuban wood is practically out of the market. There is a good demand for Circassian as well as the majority of other fancy woods.

Hardwood flooring manufacturers have the situation well in hand. There is a good demand at satisfactory prices and in place of the usual over-stock in factory warehouses, the market is over-sold in both oak and maple flooring to a considerable extent.

The handle trade is in a fairly satisfactory condition.

Building operations for October in the chief commercial centers, as shown in the news columns of this issue, are highly satisfactory, as they show, as compared with October of a year ago, an increase of eight and three-quarter per cent, and for the first ten months of

the year an increase of four and one fifth per cent. There is every reason to believe that building operations will continue active throughout the winter.

Even a greater increase in demand is manifest in the furniture and kindred trades, and there is no reason to assume that an active demand for hardwoods is not assured for months in advance.

Growing Fence Posts in Indiana

A few years ago Speaker of the House Joseph G. Cannon was widely quoted as saying that Indiana then had more growing timber than when he was a boy. That was taken as a text by those who undertook to show that private parties were growing timber to meet the country's need, and that there was no occasion for the government to take up similar work.

A different view of the situation in Indiana is taken by Charles C. Deam, secretary of the Indiana State Board of Forestry. He does not think that even the growing of fence post timber in that state is a paying business. In a recent letter to *HARDWOOD RECORD* he said:

"We are not in possession of facts to tell us what it will cost to grow a fence post in Indiana. The greater part of the land in this state is suitable for agriculture and on such land I would estimate that it would cost more than twenty-five cents to grow a fence post. In fact, I have visited forest plantings in this state that were started for the purpose of growing fence posts, in which I would judge, if they were able to mature fence posts, they would cost the owner anywhere from fifty cents to fifty dollars. I know of a man who had a ten-acre tract of locust, who will not be able to mature a single post. I know of a catalpa planting that is over forty years old, and many of the trees are not yet large enough for posts. The land on which this planting is located is worth one hundred and fifty dollars per acre. You can figure for yourself what the posts this man reaps will cost him."

If farmers of Indiana are raising timber on land worth one hundred and fifty dollars an acre for other purposes, they are making a mistake. That land is too valuable to be given up to timber growing. Woodlots should be maintained on rough, poor, cheap land. Odd corners and waste places will grow trees, often

SUBSCRIPTION TERMS: In the United States and its possessions, and Canada, \$2.00 the year; in foreign countries, \$1.00 extra postage.

In conformity with the rules of the postoffice department, subscriptions are payable in advance and in default of written orders to the contrary, are continued at our option.

Instructions for renewal, discontinuance, or change of address, should be sent one week before the date they are to go into effect. Both old and new addresses must be given.

Both display and classified advertising rates furnished upon application.

Advertising copy must be received five days in advance of publication dates.

Telephones:—Harrison 8086-8087-8088.

Henry H. Gibson, Editor; Hu Maxwell and Edwin W. Meeker, Associate Editors.

Entered as second-class matter May 26, 1902, at the postoffice at Chicago, Ill., under act of March 3, 1879.

as well and sometimes better than the most fertile land. While Indiana farms contain a large per cent of agricultural land, it is equally true that not all the land in the state is of that class. If all the thin and rough tracts are devoted to tree growing and the best kinds are planted, it is reasonably certain that fence posts can be produced cheaply and in quantities sufficient to supply the market, with a good deal of timber left for other purposes.

The Mahogany Situation

As early as last June a prominent Liverpool mahogany broker predicted that no material alteration in market conditions on this wood were likely to obtain until October. This prediction has been well fulfilled, because receipts of all varieties of this wood have been light until September, when they came forward in large quantities. In the face of this fact prices have not fallen, and are even firmer than they were in the early summer. The excellent condition of trade generally is more than taking care of the increased import.

In the October auctions the rooms were crowded with a large number of buyers, notably from this side of the Atlantic, and keen competition took place over nearly every lot offered. Even low-grade wood attracted active buying. A fresh record was made in the speed of selling, as in the first two and a half hours 750 lots were offered and sold. Prime lumber logs averaged 51½¢ per foot Liverpool measure, while figured logs ranged from 1s to 9s 7d, or about \$2.30 per foot. Liverpool mahogany measure averages about thirty per cent in favor of the purchaser, when compared with actual log contents. Catalogues containing more than 3,250,000 feet were cleared without the slightest difficulty.

Good authorities concur in the belief that while the November Liverpool auction sales will comprise fairly large catalogues, imports will fall off and only moderate quantities will be offered for some months to come. There is not the slightest possibility of any reduction in prices as the absolutely known requirements to the market will prevent this.

The market of the world is absolutely bare on some varieties of mahogany, and the wood is surely "coming into its own," to which its remarkable merits fully entitle it.

Lumber Exports and Imports

The Department of Commerce and Labor in its monthly summary shows that for August last the total value of exports of wood and manufactures thereof involved a value of \$137,702, as compared with \$67,073 of August, 1911.

The cabinet wood imports for August, 1912, were 121,483 feet, having a value of \$2,124,007, as compared with 102,128 feet and a value of \$1,812,590 for the corresponding month of 1911.

The total value of foreign woods imported during the first eight months of 1912 was \$10,303,275, which was nearly \$2,000,000 in excess of the corresponding period for 1911.

Rush Work Expensive

The manufacturer is fortunate who makes money out of a rush order. Hurry work is not necessarily profitable, though to all outward appearances business may seem unusually good. The maker of furniture, vehicles, boats, interior finish, or any other commodity in the production of which labor is an important item, or expensive machinery is used, can bear testimony to the fact that anything which disturbs the even, healthy operation of the shop, mill or factory increases cost rather than profit. Extra men put on a job to hurry it through

are seldom as efficient as the man whose employment is steady; nor have they the same interest in the work. They understand very well that they are temporarily on the pay roll, and it is no more than human nature for them to try to make the most while they have the chance. It is not to their interest to hurry through the work and finish the job, nor does painstaking care especially appeal to them.

In addition to the extra force put on while the rush lasts, it is often found necessary to keep the regular force working overtime. That is expensive in two ways—overtime calls for a higher rate of pay, and men who are working extra hours are unable to come up to the same efficiency for the whole time which they attain while working only regular time.

Rush work disconcerts plans. It breaks in and dislocates, and when the rush is over and the regular work is once more resumed, it is generally felt that something has been lost by the interruption. Fits and starts consume energy without accomplishing as much as the steady pace.

Rush work is not necessarily undertaken without fully matured plans, but it often is, and that is liable to lead to loss. In the hurry to get the job and to take care of it, other matters on which profits depend may be slighted or overlooked, and in the final balancing of the account a good many things may be found charged up to the rush order which were not thought of at first.

Hurry work wears and tears machinery more than steady use. That is due to the temptation to neglect small repairs until they create the necessity for larger ones. When work is going on steadily, and everything is normal in the shop, the mending and repairing are not shoved off until some other time, but are looked after at once, and "a stitch in time saves nine" in the factory as well as anywhere else. This is particularly true when the plant is being crowded beyond its normal capacity. As speed increases in arithmetical ratio, energy must increase in geometrical ratio. It is a law of physics. That is what tears and breaks the steel machine as well as the human

machine in all lines of endeavor.

Well managed shops recognize that moderate business, well watched and carefully executed, is preferable to rush orders which must be carried out under high pressure.

The Eucalyptus Game

HARDWOOD RECORD several times has taken occasion to express unqualifiedly its opinion of the unscrupulous promoters who are engineering eucalyptus planting and land sales in California. This game very largely has been made possible by untruthful statements, not particularly concerning the rapidity of eucalyptus growth, but as to the quality and value of the wood for high-class purposes.

One of the more recent legends emanating from some of this cult is the statement that the Pullman Company is employing eucalyptus to the exclusion of mahogany, oak and other high-class woods for the interior finishing of its sleeping and passenger cars, and is substituting eucalyptus with a pretense that it is mahogany. This statement is absolutely without foundation in fact.

HARDWOOD RECORD is indebted to William L. Hall, assistant forester of the Forest Service, United States Department of Agriculture, for a digest of what statements the Forest Service has published, and will publish on the subject of eucalypts. It may be possible, as Mr. Hall thinks, that some varieties of this wood are not without value, but so far as the experience of the editor of HARDWOOD RECORD goes in a close analysis of numerous specimens of this material, and scores of experiments with the wood, that he has either

American Forest Trees

Attention is called to the announcement on page five of this issue HARDWOOD RECORD of the forthcoming book entitled "American Forest Trees."

This work is the result of a life-study of American forest tree growth by Henry H. Gibson, editor of HARDWOOD RECORD, and an equally long study of wood utilization by the foremost expert of the United States, Hu Maxwell, who is the editor.

It is intended that this book shall constitute a compendium of all that is worth knowing in both a scientific and commercial way concerning the forest tree growth of this country.

No expense is being spared in the mechanical execution of the work, and the large sale already made emphasizes the fact that it is a book demanded by scientists, and all interested in the practical end of tree growth and wood utilization.

witnessed or has seen results on, he never has encountered in commercial quantities any variety of this wood that possesses any high value. This publication would therefore repeat its warnings against making investments in eucalyptus planting with expectations of securing any profit therefrom.

Mr. Hall's letter follows:

Washington, D. C., Nov. 4, 1912.

Editor HARDWOOD RECORD: I have obtained from the branch of silviculture in the Forest Service, a memorandum which shows the work which has been done by the Service upon eucalypts and the publications issued during the last few years. In order that you may be fully advised on what has been done I include a large part of the memorandum below:

In January, 1907, Circular 59, Forest Planting Leaflet on Eucalypts. This circular in addition to suggestions in regard to planting speaks of yields which probably may be secured from plantations of blue gum. A comparison of these predictions with actual measurements made subsequently and published in other bulletins shows that they are not excessive. Because of the predictions of excessive yield made by eucalyptus companies in order to induce people to buy stock in eucalyptus companies and to invest in lands to be planted to eucalypts, the Forest Service during the summer of 1910 made a series of measurements covering a large number of older groves in the state of California. The results of these measurements were published in the fall of 1910, as Bulletin No. 1 of the California State Board of Forestry, which mentions on its title page the co-operation with the Forest Service. A comparison of some of the yields determined under this co-operation and published in the bulletin with the statement of yields for the same groves in a privately published circular of the fall of 1910, may be of interest:

	Yield given by private circular	Yield given by co-operative bulletin
	Feet, B. M.	Feet, B. M.
Grove No. 1.....	64,360	1,280
Grove No. 2.....	33,170	1,510

The maximum yield stated in the private circular is 213,796 feet, B. M., for a grove twenty-four years old. The maximum yield given in the co-operative bulletin is 57,820 feet, B. M., for a grove thirty-two years old.

In December, 1910, Circular No. 179, "Utilization of California Eucalypts," was published. A considerable part of this bulletin is devoted to a statement of results obtained in strength tests which were made in Forest Service laboratories. This circular calls particular attention to the fact that information furnished by the Forest Service has been quoted in such a way as to convey misleading impressions and sometimes even to falsify the original meaning.

Forest Service Bulletin No. 87, "Eucalypts in Florida," was issued April 29, 1911. Pages 31-33 of this bulletin call particular attention to the uncertainty of large returns from commercial plantations.

Circular 210, "Yield and Returns of Blue Gum (eucalyptus) in California," is now in page proof and will be issued within a comparatively short time. The object of this circular is to interpret and make even more clear the meaning of the statements of yield made in Bulletin No. 1 of the California State Service.

In reply to inquiries regarding the future of eucalyptus plantations the Forest Service has always stated that our present knowledge of the timber produced by plantations in this country does not justify a too sanguine estimate of returns where it is proposed to produce material other than fuel woods, which require a much longer period to reach marketable size. Our belief has been stated that a eucalyptus plantation will yield under favorable conditions a revenue equal to any forest plantation.

The Service does not take the position that eucalypts are without value. Neither so far as I know do any of our men who have intimate knowledge of eucalyptus growing and eucalyptus wood hold that opinion individually. We are in fact confident that several of the species of this tree will prove valuable additions to the forest growth in certain sections of the United States. Practically every recent publication of the Service on eucalypts has, however, carried a warning against the over-claims as to yield. Circular 210 soon to be published undoubtedly contains the strongest statements of warning regarding investments in eucalypts yet given to the public.

Very sincerely yours,

WM. L. HALL,
Assistant Forester.

Advanced Lumbering

A new thought in lumber methods applied to this continent is suggested by F. L. Barledt, a British capitalist holding large interests in forestry and wood manufacturing enterprises in Germany and Russia. This gentleman recently obtained a concession of a large area of forest lands in northern Ontario. He has familiarized himself with the timber resources of that section, and has established a location for a system of forest industries. The area when operated will be managed on principals of modern forestry, under which the

poor timber and dead trees will be cleaned out first, and every part of the tree from the roots up utilized in the manufacture of various wood products.

A system of reforestation will be pursued and the standing timber protected from diseases, and cared for by experts. If a sufficiently large area can be obtained, a corps of trained foresters and experts in woodworking industries from Europe will be imported and will have steady employment in the new enterprise.

"Kraetzer Kured" Lumber

The apparatus known as the Kraetzer preparator, a steam cylinder of large capacity in which lumber is treated with steam under pressure immediately after being manufactured, and which has been installed in connection with several sawmills in various parts of the United States during the last year, is accomplishing almost marvelous results in the prompt and accurate seasoning of lumber.

Among the more recent installations of this equipment are those at the Bennett Hardwood Lumber Company, Memphis, Tenn.; the Lamb-Fish Lumber Company, at Charleston, Miss., and the Forman-Earle Company, Heidelberg, Ky. Another installation is being made at the present time at the big lumber and veneer plant of C. L. Willey, Chicago, for the handling of mahogany, black walnut and other high-class hardwoods.

E. T. Bennett of the Bennett Hardwood Lumber Company, reports the unqualified success of the apparatus at his plant. Without in any wise injuring the strength and texture of the wood, he has succeeded in reducing the weight of green one-inch gum two thousand pounds within two hours, and has shipped this stock nine days from the saw, reduced to a weight within two hundred pounds as light as he has ever achieved with stock in the yard on sticks for twelve months. He holds he is able to blow out three-eighths gum and oak to good shipping condition in twenty-four hours, although the common practice of other users is to employ about five days on thin stock; ten to fifteen days on inch lumber, and about thirty days on two-inch stock.

One of the remarkable features of the results of this steam-treated wood is the fact that there are practically no seasoning defects developed in the process, a shrinkage so slight as to be almost nil, and a uniforming of color that makes every board look as though it came from the same log. This last feature is notably true in gum and red oak product. The color of white oak, maple, birch and other woods that are not rich in tannic acid, remains unchanged.

The Lamb-Fish Lumber Company at Charleston is treating all its red and sap gum and oak in this apparatus, and is then kiln-drying the resultant product. This company expects to fully treble the output of its kilns, through which it formerly has been handling 600,000 feet of lumber monthly.

The employment of the Kraetzer process, under handling in its highest efficiency in connection with sawmill operations, contemplates the abandonment of the lumber yard *per se*. The lumber is stuck on an equivalent to a dry-kiln truck at the sawmill chains, and by means of transfer tracks is moved forward to the steam cylinder, shoved therein, steamed, pulled out, and on the same trucks shoved out onto a series of storage tracks, at the extremity of which it is loaded onto cars when dry, or transferred to dead piling storage sheds.

This system constitutes simplicity itself, and spells an economy, it is alleged, between the mill and the loaded car of between three and four dollars a thousand feet. This economy is made up of less labor cost, eliminating lumber yard planking, foundation timbers and roof boards; less investment in stickers; saving in interest on large investment; less insurance cost; minimizing seasoning defects and shrinkage; and altogether securing both higher efficiency and better seasoned lumber in a short space of time.

Undeniably the Kraetzer process spells a most remarkable evolution in lumber seasoning methods, and it is suggested to those who wish to secure a manifest economy, much higher efficiency and infinitely better results in lumber seasoning, that they visit one of the plants where the equipment is employed, and witness the results obtained.



Pert, Pertinent and Impertinent



Keepin' Busy

Some fellers just has an awful time,
A-keepin' busy.
Loadin' round in clubs an' no place
For keepin' busy.
Seems to me there's mischief brewin'
In them fellers sittin' there stewin'.
Shame they ain't got work ter
Keep 'em busy.

Us fellers in the lumber game
Is always busy.
A sellin' stock and hustlin' cars
Keeps us busy;
We're on the job from morn till six.
Sortin' piles that's in a mix.
U's fellers just has got to stick -
An' keep busy.

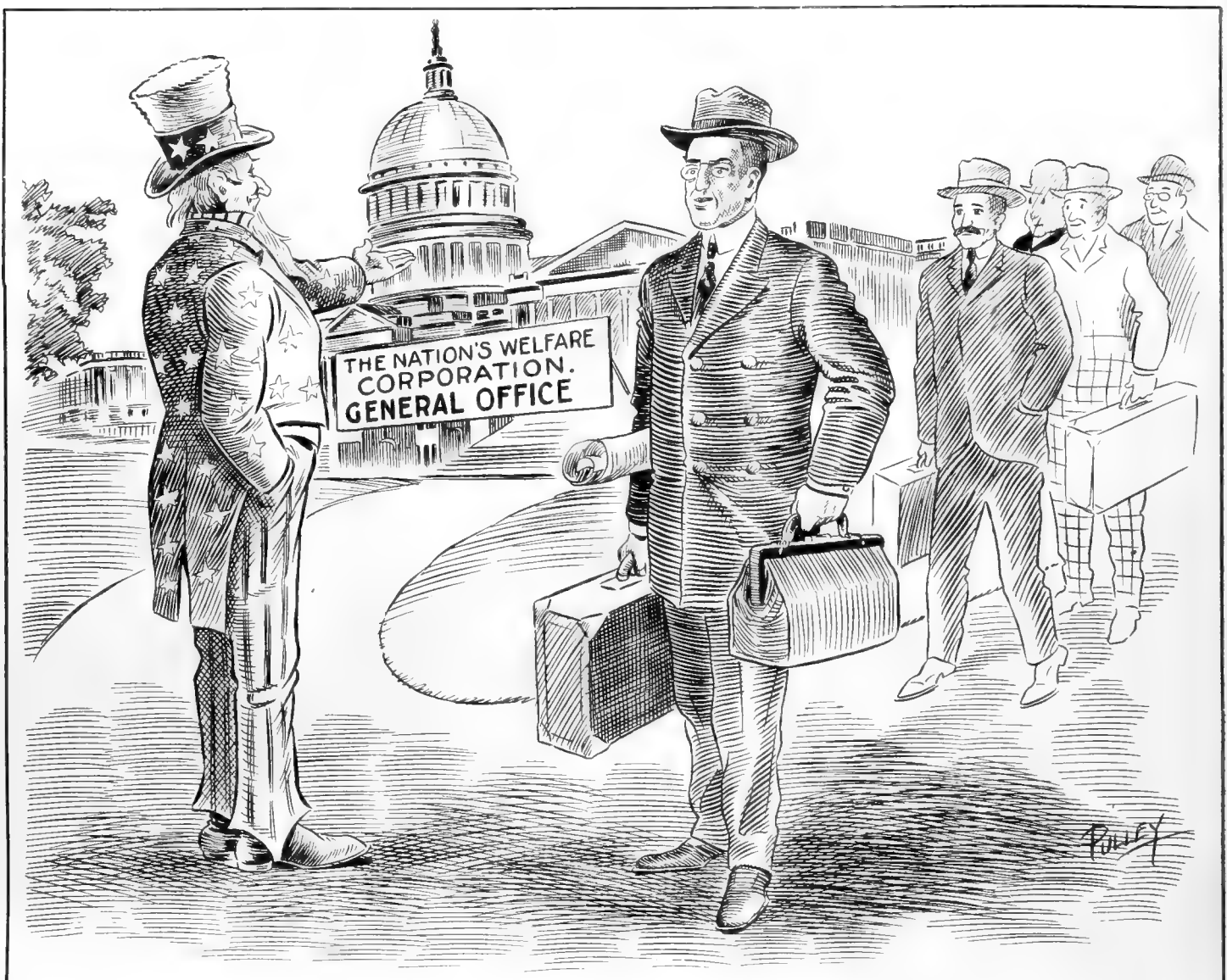
Now just look at them financiers
A-keepin' busy,
Makin' money easy as not by
Keepin' busy;
There's Morgan and there's Rockefeller,
And the piles of coin they got is yeller.
Why, that just ought to make a feller
Keep busy.

My rich friends say as I should rest
From keepin' busy,
An' finish my work and stop my quest
Of keepin' busy;
Why, I'm always in an awful fix.
Collectin' accounts or settlin' kicks.
Don't never see no chance at all
From keepin' busy.

When night comes 'round I'm tuckered out,
Fer keepin' busy.
An' the hay seems soft an' restful like,
After keepin' busy;
As my eyes they close and I starts to doze,
I wonder's if the idle folks ever knows
What fun a feller has as shows
He's always keepin' busy.

Now comes the man with hard luck tale,
With orders scarce and few.
Some customer must help him out,
Is his appeal to you.
His method doesn't sell the goods
To you or other men,
And he leaves without an order,
Vowing ne'er to come again.

ON TRIAL



Uncle Sam: I'm entrusting this business to you and your friends—it's up to you to make good and hold your jobs.

A Fitting Pair

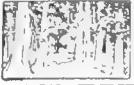
"Jinks and his wife are well matched."
"In what way?"
"She can't cook a dinner without burning something, and he can't sit down to one without roasting somebody.—*Baltimore American*."

Domestic Discipline

Peck—"You will never get the dog to mind you, my dear."
Mrs. Peck—"I will with patience. You were just as troublesome yourself at first."
—*Boston Evening Transcript*.

How to Travel

"When I go on a trip I never know what I ought to take with me."
"Oh, I do; it's quite simple. I take all my drosses and leave my husband behind."
—*La Vie Parisienne*.



American Forest Trees



NINETY-NINTH PAPER

LOGDGEPOLE PINE

(*Pinus contorta*—Loud.)

The common name of this tree was given it because its tall, slender, very light poles were used by Indians of the region in the construction of their lodges. They selected poles fifteen feet long and two inches in diameter, set them in a circle, bent the tops together, tied them, and covered the frame with skins or bark. The poles were peeled in early summer, when the Indians set out upon their summer hunt, and were left to season until fall, when they were carried to the winter's camping place, probably fifty miles distant. Tamarack is a common name for this pine in much of its range; it is likewise known as black pine, sprucey pine, and prickly pine. Its leaves are from one to two inches long, in clusters of two. The small cones adhere to the branches many years—sometimes as long as twenty—without releasing the seeds, which are sealed within the cone by accumulated resin. The vitality of the seeds is remarkable. They don't lose their power of germination during their long imprisonment.

The lodgepole pine has been called a fire tree, and the name is not inappropriate. It profits by severe burning, as some other trees of the United States do, such as paper birch and bird cherry. The sealed cones are opened by fire, which softens the resin, and the seeds are liberated after the fire has passed, and wing their flight wherever the wind carries them. The passing fire may be severe enough to kill the parent tree without destroying or bringing down the cones. The seeds soon fall on the bare mineral soil, where they germinate by thousands. More than one hundred thousand small seedling trees may occupy a single acre. Most of them are ultimately crowded to death, but a thick stand results. Most lodgepole pine forests occupy old burns. The tree is one of the slowest of growers. It never reaches large size—possibly three feet is the limit. It is very tall and slender. A hundred years will scarcely produce a saw-log of the smallest size.

The range of this tree covers a million square miles from Alaska to New Mexico, and to the Pacific coast. Its characters vary in different parts of its range. A scrub form was once thought to be a different species, and was called shore pine.

The wood is of about the same weight as eastern white pine. It is light in color, rather weak, and brittle, annual rings very narrow, summerwood small in amount, resin passages few and small; medullary rays numerous, broad, and prominent. The wood is characterized by numerous small knots. It is not durable in contact with the ground, but it readily receives preservative treatment. In height it ranges from fifty to one hundred feet.

The government's estimate of the stand of lodgepole pine in the United States in 1909 placed it at ninety billion feet. That makes it seventh in quantity among the timber trees of this country, those above it being Douglas fir, the southern yellow pines (considered as one), western yellow pine, redwood, western hemlock, and the red cedar of Washington, Oregon, and Idaho.

Lodgepole pine has been long and widely used as a ranch timber in the Far West, serving for poles and rails in fences, for sheils, barns, corals, pens, and small bridges. Where it could be had at all, it was generally plentiful. Stock ranges high among the mountains frequently depend almost solely upon lodgepole pine for necessary timber.

Mine operators find it a valuable resource. As props it is cheap, substantial, and convenient in many parts of Colorado, New Mexico, Wyoming, and Montana. A large proportion of this timber which is cut for mining purposes has been standing dead from fire injury many years, and is thoroughly seasoned and very light. It is in excellent condition for receiving preservative treatment.

Sawmills do not list lodgepole pine separately in reports of lumber cut, and it is impossible to determine what the annual supply from the species is. It is well known that the quantity made into lumber in Colorado, Wyoming, Montana, and Idaho is large. Its chief market is among the newly established agricultural communities in those states. They use it for fruit and vegetable shipping boxes, fencing plank, pickets, and plastering lath.

Railroads buy half a million lodgepole pine crossties yearly. When creosoted, they resist decay many years. Lodgepole pine has been a tie material since the first railroads entered the region, and while by no means the best, it promises to fill a much more important place in the future than in the past. It is an ideal fence post material as far as size and form are concerned, and with preservative treatment it is bound to attain a

high place. It is claimed that treated posts will last twenty years, and that puts them on a par with the cedars.

In Colorado and Wyoming much lodgepole was formerly burned for charcoal to supply the furnaces which smelted ore, and the black-smith shops of the region. This is done now less than formerly, since railroad building has made coal and coke accessible.

In one respect, lodgepole pine is to the western mountains what loblolly pine is to the flat country of the south Atlantic and other southern states. It is aggressive, and takes possession of vacant ground. Although the wood is not as valuable as loblolly, it is useful,



A TYPICAL FOREST GROWTH OF LOGDGEPOLE PINE IN MONTANA



SECTION OF BARK OF LODGEPOLE PINE

and has an important place to fill in the western country's development. Its greatest drawback is its exceedingly slow growth. A hundred years is a long time to wait for trees of pole size. Two crops of loblolly saw-logs can be harvested in that time. However, the land on which the lodgepole grows is fit only for timber, and the acreage is so vast that there is enough to grow supplies, even with the wait of a century or two for harvest. The stand has increased enormously within historic time, the same

as loblolly, and for a similar reason. Men cleared land in the East, and loblolly took possession; fires destroyed western forests of other species and lodgepole seized and held the burned tracts.

If fires cease among the western mountains, as will probably be the case under more efficient methods of patrol, and with stricter enforcement of laws against starting fires, the spread of lodgepole pine will come to a standstill, and existing forests will grow old with out much extension of their borders.



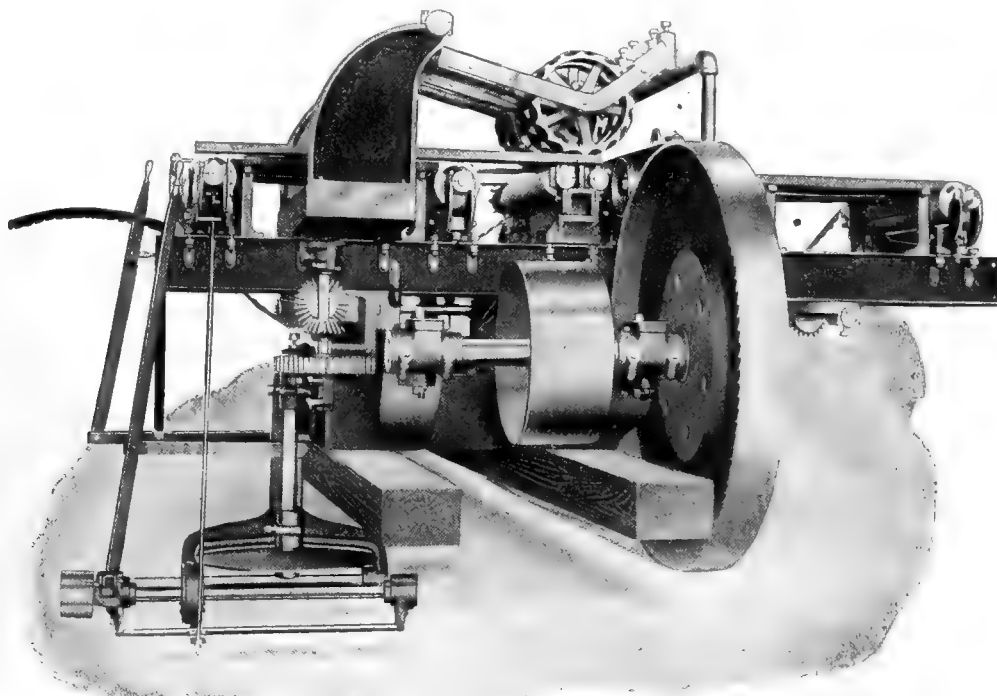
CONE AND NEEDLES OF LODGEPOLE PINE

New System of Quarter-Sawing

When quarter-sawing oak was first introduced, so as to show the remarkably beautiful flake and figure of this king of American hardwoods, the waste was so considerable on small logs that it was not regarded profitable to quarter-saw logs less than twenty-eight inches and upwards in diameter. Many attempts have since been made to quarter-saw small oak logs, but manufacturers generally

oak production on a large scale, to solve the problem of producing quarter-sawed oak lumber in a highly satisfactory way from not only its large timber, but from its smaller logs as well.

A previous article, with colored illustrations in *HARDWOOD RECORD*, exhibited the splendid figure that the Yellow Poplar Lumber Company was attaining in its quarter-sawed oak production, but



SIDE VIEW MERSHON HORIZONTAL BAND RESAW ADAPTABLE FOR SAWING LOG SECTIONS

conceded that the loss in quarter-sawing small logs more than ate up the difference in price that could be obtained from plain sawed stock.

With the growing scarcity of oak timber, and the increasing demand and higher prices obtainable for quarter-sawed oak strips, numerous efforts have been made to utilize the smaller and equally high-class logs into a quarter-sawed product made on a profitable basis. It has remained for the Yellow Poplar Lumber Company in Coal Grove, O., which this year for the first time entered into

no specific reference has hitherto been made to the methods of manufacture by which this desideratum was obtained.

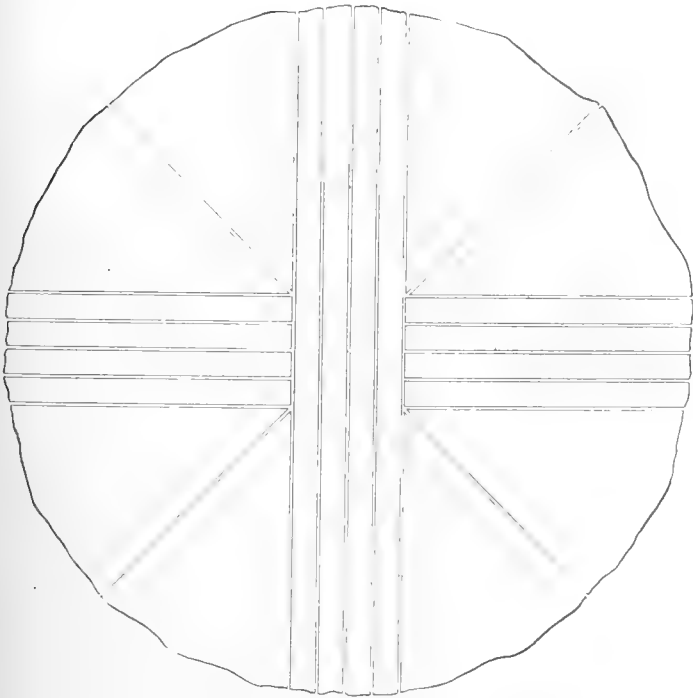
The Yellow Poplar Lumber Company saws its large logs in regulation fashion to quarter-sawed stock on its two big band mills, and its small logs are reduced to eighth log sections also on its big mills; and the eighths are then transformed into boards and strips by the use of a modification of a horizontal band resaw. The sections are fed to the machine four or five at a time, turned over and returned to the feed end of the machine by means of

live rolls; again put through the rig; again flopped and returned; and so on until the piece is reduced to a small wedge shaped section.

The specific method of handling these logs is exhibited by the drawings accompanying this article. The logs are split one side of the heart, and the minor section dropped back to the log deck. The boards are then sawed from the larger section through and across the heart. The section remaining on the carriage has a minor quarter section sawed from it, which is dropped back to the log deck. Four or five boards are then taken out of the center section, and the remaining quarter is turned on edge and split with the big saw. The third quarter is then split, and the first half log dropped to the log deck follows the same process. The eight wedge-shaped sections of the log are then forwarded by live rolls to the horizontal band resaw, and are reduced to boards and strips.

A first-class horizontal band resaw of a type similar to that shown in the half-tone accompanying this article, which incidentally is produced by Wm. B. Mershon & Co., Saginaw, Mich., is capable of reducing these small flitches to inch lumber and strips at the rate of from thirty to thirty-five thousand feet in ten hours.

This particular illustration represents a side-view of a Mershon horizontal resaw. The machine consists of a framework of structural steel about twelve feet long, carrying six driven rolls, which form the feeding bed of the machine. This arrangement of rolls is very similar to the live rolls used for conveying stock in a saw-mill. The machine is mounted on a heavy bed plate, which also carries the band wheels. The saw blade passes over the center of this train of feed rolls, and is supported by means of so-called crowding wheels or rotary guides, so as to present a relatively short-supported cutting section of the saw to the stock. This construction makes it possible to feed stock of either regular or irregular dimensions, and remove any thicknesses up to four inches



SHOWING HOW LOG IS SAWED FOR LUMBER AND FLITCHES ON THE BAND SAW

from the bottom surface. Pressure rollers ride on top of the stock, and are so designed as to adapt themselves to any irregularities, no matter what they are.

The experience of the Yellow Poplar Lumber Company in manufacturing its quarter-sawed lumber with the supplemental horizontal band resaw equipment has been so satisfactory that several other producers of quarter-sawed stock have purchased a similar rig. The

cost-records made by this house prove that it can produce quarter-sawed stock by this method with a loss of only about twenty per cent; that its stock is perfectly quartered, and the resultant product is absolutely accurately sawed. In width of stock involving logs down to eighteen inches in diameter, it is showing an average of better than eight-and-a-half inches, which is a remarkable width for quarter-sawed oak lumber. In general cost of production the company is effecting a manifest economy over any other concern engaged in quarter-sawing lumber by the older approved methods.

The new system is entirely worthy of a thorough investigation by those engaged or desiring to engage in producing quarter sawed lumber from any variety of wood.



SHOWING HOW THE SECTIONS ARE TRANSFORMED INTO BOARDS AND STRIPS BY MEANS OF HORIZONTAL BAND RESAW

River Birch for Cooperage

River birch (*Betula nigra*) has never been prized for any purpose. It is the softest of all the birches and is devoid of figure and attractive color. Consequently lumbermen take it only when of large size or quite convenient. River birch occurs from Massachusetts and New York southward east of the Allegheny mountains to western Florida; west in the Gulf states to Texas and north through Mississippi to eastern Oklahoma, eastern Nebraska, central Minnesota, southern Wisconsin and Ohio. In addition to the name river birch it is also known as red birch, water birch, and occasionally as blue birch and black birch. It does not form forests but grows in clumps or scattered mostly along streams.

The tree rarely attains very large dimensions, though in good situations a diameter of two feet and a height of seventy-five feet are not uncommon. The bark is rough and shaggy, giving the tree a ragged appearance. The wood is light and soft and fairly uniform in texture. The pores are scattered throughout the growth ring—diffuse-porous. While inferior to the other birches the wood is beginning to have a value for cooperage.

There is no question about the suitability of river birch for cracker, flour and similar barrels. It is probable that it will be found satisfactory for packing house barrels for the shipping of pork and lard. The revision committee of the Chicago Board of Trade has issued a revised list of woods for use in the packing house trade and birch is included. As no species is mentioned all may be tried including paper birch, western birch, black or sweet birch, yellow birch and gray birch. The western and gray birch are too far from the trade to be available. Other woods included in the revised list are white oak, red oak, burr oak, and white ash.

River birch is said to make high-grade barrel hoops—at least one farmer in New Jersey has made a good living out of the cutting of such material. He has a small plant for making hoops and his first experiments with river birch were made rather secretly. He was surprised to find that dealers preferred the new hoops to any other in the lot. This set the farmer to thinking, and as a result he bought for a song all the river birch for miles around. His neighbors were glad to get rid of it and he has a bigger demand for his product than he can fill. River birch hoops are said to be tough and strong and very durable. As there is considerable of the timber scattered along the streams throughout the East and South, there seems no reason why the material should not be more widely employed for this purpose.

Some of the fruit and vegetable basket makers in eastern Maryland work river birch into bands around the tops of the baskets, and it is said to be as satisfactory as elm.

S. J. R.



The Middleman in Lumber Business



Editor's Note

The following letter is by a well-known, whole-sale hardwood operator and presents sundry reasons "why the wholesaler is," and why he will continue to be an important factor in the distribution of lumber. It is published without comment, and communications in like or contra argument on the same subject are solicited.

Ideas are created each day and service is nearing perfection. Better service costs more in proportion. Express charges, for instance, are more than freight charges on account of quicker delivery. This is the day of service. There is a great demand for it. People demand it, yet it is indirectly responsible for the increased cost of living. For instance, it is stated that traveling costs much more than it used to and yet most people prefer to save time by taking the fast trains on which an extra fare is charged. That is service and they are paying for it. Food is much higher in price than it was years ago, but remember that the housewife went to market with a basket, selected the things she wanted and brought them home herself. Now she calls the grocer by telephone, orders what she wants and the grocer delivers it. Of course prices are much higher because the grocer has to go to the market, bring it to his store and then deliver it to the customer's home. Service charges only. The grocer has to keep wagons, drivers, telephone girl, etc. Who pays? You, always! Why? Because you are being saved all the time, labor and worry of marketing—you simply spend three minutes on the telephone ordering. The grocer, then, is your servant and his charges are added to the original cost of the goods. Are you willing to go back to the days of inconvenience, the days of slow travel, slow service, work twice as hard and save a little only on the cost of living? There is hardly one out of a thousand that really would.

Ever stop to think of the chaotic condition this country would be in if all the wholesalers and middlemen were to be eliminated? The writer is speaking not only of his own business but of every commodity. Take produce—eliminate the jobber of farm produce, and the farmer would have to sell his own stuff. In turn this would mean peddling it out to the consumers—a traveling market. In other words, we would be about thirty years back of the game. Then again it takes the farmer's time, which is more valuable right on the farm looking out after his growing crops and where he is absolutely needed all the time. If he puts a man on the wagon to sell it, that man's time costs money—and it doesn't bring the results. The jobber of farm-produce simply gets what the farmer would pay a man or less—more often the latter. A large sale is made instead of piecemeal. Why go any further? The middleman sells his stuff and the farmer gets his cash. This is an explanation of the middleman that leaves no questions unanswered, nor is there any room for argument.

What applies in the produce business applies in general to all other lines—understand, I say general, because the trade-channel may be longer or shorter, depending on the business.

I heard a lumber millman say recently, "But if we sell through wholesalers, we lose our identity with the trade." So you do, Mr. Millman, with the consumers, but let me say to you that your identity is far more valuable to the wholesaler than it ever will be to the consumer. If you were manufacturing a trade-marked article I would not say this, but you know right well that no two cars are alike, even from your own stock. What you are after is to sell your stock to the best advantage in the most economic way. The wholesaler is vitally interested in you. In many cases he finances you. Remember that he serves a community of people. He is watching out for the new points in connection with your manufacture and your product that will improve his sales and that will interest his community, which in turn knows him and relies on what he says. Now how about that, Mr. Millman? Are you a community specialist? Are you here or there in this community, in that one? Are consumers here interested in you in some far off place. Could you expect them to be?

If you don't believe this, Mr. Millman, just take your stock-sheet and visit some consumers in a far off section where you are unknown. Unless you sell under the market price or unless there is a tremendous shortage of lumber, you will not make sales. Of course if you do sell for less than the market, this argument won't hold, because I can

send out a "dispenser" with a stock-sheet and low prices and he'll get all the orders wanted. You won't need a salesman in that case.

Consumers live in a little world of their own. Access to them is had by the "concentrate"—the wholesaler in their section who looks out after their interests; who knows just what is going on in their plants all the time; who knows their financial standing and how much they are to be trusted. Can you, Mr. Millman, in a far off place keep in touch with consumers scattered all over the country?

Now understand me rightly. I'm talking from an economic standpoint. I claim that the wholesaler represents the lowest sales cost per thousand feet. Of course you can put a man on in every section, but the salary, office expenses, traveling expense, etc., will be more in proportion than what you would pay a wholesaler by selling for a little less. So get that straight—economic handling.

On being asked why he preferred to buy from wholesalers rather than direct from the mills, one of the largest buyers in the East said, "Well, they are right here on the ground. I can get them on the 'phone and don't have to wait days for an answer. The wholesaler is in close touch with his mills; he understands conditions where I haven't the time to study them; the wholesaler gives me splendid service and it more than pays when you consider the little more in price over the general mill's price. Most of the mills charge about what the wholesaler does anyway. Perhaps I may be used to dealing with a certain mill. Suppose it is out of the stock I want. Perhaps I have been dealing with it only and don't know where to get the stock. That's the wholesaler's business and he keeps posted so that when I want a car of lumber he can get it. I haven't the time to look around. Yes, I get stock-sheets from the mills, but what do I know about their stock, especially the value of it? I leave it to the wholesaler; he knows, for he visits the mills and sees what it is and the value of it." That hits the nail on the head, especially the "value" part of it. Consumers haven't time to spend looking into these things. They leave it to the wholesaler. In other words, "service" again.

Here's what one of the largest mills in the country says—this from the sales manager: "Consumers? No, sir! We do business with the wholesaler in his respective market. We get cash always and are nearly always sold up. The wholesaler gets good service from us—we always give the percentage of 14-foot and 16-foot, the widths and average width, dryness, special points, prices and rates—all the information he could possibly ask for. That saves his writing up and we having to answer. All he must do is to send the orders. We keep them fully posted, however. Would it pay us to have salesmen? No, indeed! That would mean an increase of many thousands of dollars on the payroll and the little extra we'd get wouldn't anywhere near pay for it. Anyhow, we couldn't keep in as close touch with the consumer as the wholesaler does. We're specialists in manufacturing; the wholesaler is a sales specialist. We're content and—making money."

There are the two sides and both from representative men in their respective lines of operation. This is a progressive age. Start the mill-to-consumer idea and you're not progressing. You're going backwards.

Watch the wholesaler at work. Suppose one of his mills writes that the block of oak will average 11 inches and will run eighty per cent 14-foot and 16-foot. The wholesaler gets out about fifty letters describing the stock to his community. He knows every man that will be interested. He knows every man who wants long lengths. From an economic standpoint again, could a millman circularize a list of names in a community and get the results that the wholesaler in that section could? That's answered already—the mill couldn't do it. Why? Well, in the first place every section contains men of a different business type and each man has his individual character-

istics. They must be approached in different ways. A Bostonian must be approached from one standpoint, a New Yorker from another, and so on. Personal contact with his community tells that wholesaler just how to do it—and he sells the oak to those who use it. Sure, it's psychology if you want to call it that. I'd call it specialization.

Consumers know the wholesaler and take his description any way he puts it. I'd like to gamble that half the letters you write to consumers, Mr. Millman, do not bring results. Not because they are unbusinesslike but because you have not appealed to the buyer in the right way. Yes, the wholesaler reads every word of your letters with interest; no matter how you put it, he understands you, for he understands mill conditions, etc. Furthermore, it is to his interest to sell all he can and the more selling and interest-creating points he can get the more stock he will sell. For every car you sell to a consumer you could sell five to the wholesaler in that section—and without half trying.

Now can you, Mr. Remanufacturer, afford to buy your lumber log-run for your work? Eliminate the middleman or jobber and in most cases you will have to. Why? Well, suppose you must have a grade of No. 1 common for your work. Most of the wholesalers today, in taking the cut of a mill, buy the lumber log-run and have it graded out, giving you, for instance, the No. 1 common and arranging for another to take the 1s and 2s and still another consumer to take the No. 2 common. Even now, when lumber is scarce, some of you have to take some No. 1 common in with your 1s and 2s. In the above case what will you do with the No. 2 common which is too poor for your work or the 1s and 2s which would make your product so high in price as to lose business? Millmen will take exception to the above statement. They say that they can find out the trade for each grade and kind of wood. But how about the enormous expense of going all over, finding out this trade, making contracts (which cannot always

be done at the first or even second visits, etc.) and then perhaps not getting it or not being able to keep it?

Again, if the consumer has been dealing only with a mill and it is out of the stock, where does he look? To the wholesaler. The consumer knows that the middleman is in touch with many mills and at once the stock he wants can be had. And after one experience of this kind he is pretty likely to stick to the wholesaler.

Do you realize that the wholesaler keeps prices where they ought to be? Do you realize that there would be from five dollars to ten dollars a thousand difference in price if he were not on the ground? Do you ever realize that an advance by the mills is general?

The wholesaler, the lumber magnate, the lumber baron, the reaper of immense profits as some of our worthy (?) government officials chose to call him through ignorance is the most important factor in every community. He is firmly entrenched in his position and his fortifications are being strengthened every day. He cannot be dislodged because he is necessary. He is just as important to the trade channel as the telephone central is to the telephone exchange. Neither can be done away with without chaos. The wholesaler is also the judge and sometimes dictator of values.

Some day the millenium will come. That is the day when each manufacturer will appoint a wholesaler in his respective market as his representative; when the millman realizes that this is the lowest sales cost per thousand feet; when the millman will refer all inquiries for quotation to the wholesaler in his section; when the selling price of each grade and thickness is approximately the same; when the millman will spend his entire time manufacturing and making his product more salable and of better value; when specific details are furnished the wholesaler by the millman in answer to inquiries, and when there will be one set of inspection rules. That is the day the wholesaler will come into his own.

Bird Peck in Hickory

Every user of hickory is familiar with the dark reddish brown or black streaks and spots which are so common in the wood. These discolorations are due to the work of birds—sapsuckers—which drill through the bark and into the young wood in search of sap, which furnishes a considerable proportion of their food. Sapsuckers by no means confine their attentions to hickory; on the contrary, they are quite promiscuous in their choice, so that hardly a species of tree is immune. In no case, however, is the resultant damage greater than in the hickory, not so much on account of the mechanical injury as from the consequent discoloration and blemishing of the wood.

The sapsuckers are a distinctly marked group of woodpeckers and are limited to three species. They do not dig into a tree to get out insects as is the case with the true woodpeckers, of which there are twenty-one species in the country, but to drink the sap and eat bits of the inner bark and soft cambium layer. The cambium is the formative tissue of the tree and lies just beneath the bark. It is by division of its cells that wood is formed and any injury to it appears later as a defect in the wood.

The true woodpeckers do some damage to timber, but since their borings are for the purpose of locating insects and their larvæ and eggs, the good they do far outweighs the evil. The sapsuckers, on the other hand, haven't the right kind of tongues for pulling out insects, though they balance their vegetarian diet with a considerable quantity of ants. They appear to be birds with few redeeming features.

The results of sapsucker attacks on trees are so uniform as easily to be distinguished from the work of other woodpeckers. The holes of the former are drilled clear through the bark and cambium often into the wood, and generally are arranged in rings or partial rings around the trunk, though often in rows up and down. When one finds deeply cut holes arranged with such regularity he may be sure they were made by sapsuckers.

While in many trees, particularly conifers, the holes made by the birds go only to the sap-wood, in maple and hickory, which furnish at

certain times of the year a profuse flow of sweet sap through the sap-wood, the outer ring of wood is usually punctured. This hole cuts off the flow of sap and a brown or black streak (known as iron streak) from one-eighth to three-eighths inch wide extends from a few inches to several feet above and below the wound along the line of the vessels affected. This discoloration is due to oxidation and other chemical changes in the substances in the wood, and appears to have no serious effect on the strength and other mechanical properties of the timber. It is a blemish and materially reduces the grade and market value of the material.

The damage is not confined to the streak. The puncture in the sap-wood means a break in the continuity of the fibers, a very undesirable defect in wood prized for its great toughness and resilience. Moreover, the attempt of the tree to heal the wounds produces in each hole a small knot-like projection. These affect materially the smooth working of the wood into handles because of the tendency of the grain to rough up and splinter in the immediate vicinity of the former injury.

The total damage done by sapsuckers is immense and is estimated to amount to at least ten per cent for the entire United States, rising in some localities to thirty per cent. The money value of this loss amounts to about \$600,000 per year, not counting the loss sustained by the producer or dealer on the cut timber graded out by the manufacturers' requirements in regard to bird pecks.

That such loss should occur is especially unfortunate in the case of hickory, which fills a place for which it seems there is no substitute. No other commercial wood combines to so great a degree strength, stiffness, toughness and resilience. With the supply in danger of exhaustion every effort should be made to prevent unnecessary waste. Perhaps some time it will become necessary to get rid of the birds, but only when man has eliminated the much greater sources of waste due to his own carelessness and inefficiency can he claim any real grievance against his feathered neighbors.

S. J. R.



The Wood of the Ashes



There are over thirty species of ash scattered over the northern hemisphere of the old and new worlds, of which approximately one-half are American. It is not possible to state the exact number since botanists and dendrologists are not fully agreed in all cases whether a tree belongs to a new species or is merely a varietal form of an old. Of the total number in the United States, seven are of more or less economic importance, the remainder being of only local value. They are white ash, black ash, red ash, green ash, blue ash, pumpkin ash, and Oregon ash. Probably sixty per cent of the total cut of ash in this country is the true white ash and thirty per cent black ash. On the market it is customary to distinguish only two kinds, namely white and black or brown.

As a rule the wood of ash is fairly heavy, with a density ranging from .57 to .79 that of water, the majority falling between .60 and .70. An exception is found in the water ash (*Fraxinus Caroliniana*), a small and wholly unimportant tree found in deep river swamps along the southern coast region. Its wood, unlike that of other species, is light, soft, weak, fine-textured, difficult to work on account of its sponginess. The pores in the springwood are very small, indistinct and rather widely separated in a single row. The pores in the summerwood are scarcely if at all visible without a lens and then show the characteristic arrangement of the genus. Mention is made of this tree only because of its totally different character from that of the other members of the genus. Botanically it is an ash, but no woodworker would admit it.

Taken as a whole the wood of the ashes is strong, tough, straight-grained, easy to work, odorless and tasteless, and of high economic importance. The sapwood is white, making up a large proportion of the tree, especially of those growing in the open; it is preferred to heartwood for most purposes. The wood is perishable in contact with the soil. It is highly esteemed for vehicle construction, handles, implements and bent wood. It also makes excellent interior finish when sawed tangentially or in the case of veneer, rotary cut, the white summerwood producing a pleasing contrast with the darker springwood of the growth layers. Burls are not uncommon which make up into valuable veneers.

The amount of ash lumber sawed in 1910 was a little more than 246,000,000 board feet, 45,000,000 feet less than in 1909 and nearly 21,000,000 feet more than in 1908. It is one of the most widely distributed of all woods and was reported in 1910 as cut by nearly 7,000 mills located in 39 states. The value of the lumber was more than \$6,000,000. The southern states have advanced in the production of this lumber more rapidly since 1906 than any other section, Kentucky, Louisiana, Arkansas, and Missouri showing a considerable increase, while New York, Michigan, and Pennsylvania show a decrease.

In the production of slack cooperage staves, ash ranked seventh in

1910, with a total of 65,234,000. Ash staves are more extensively used for butter and lard tubs and packages than any other kind, and the major portions are made in Arkansas and Missouri. For tight cooperage heading ash ranked a poor sixth, with 470,248 sets or less than 2 per cent, to over 17,000,000 or 70 per cent from white oak. A total of 2,356,000 board feet of ash wood was consumed in 1910 in the manufacture of veneers, which was a considerable decrease over the three previous years.

From the following table can be had a fair idea of the comparative size of the mature trees and the average weights and densities of their woods:

Common Name	Average Diameter, Ft.	Maximum Diameter, Ft.	Average Height, Ft.	Maximum Height, Ft.	Specific Gravity	Weight per Cu. Ft., Lbs.
White	2.5	6	80	120	.65	41
Black	1.5	3	70	90	.63	39
Red	1.1	2	50	70	.62	39
Green	1.5	2	50	65	.71	44
Blue	1.5	3	65	120	.72	45
Pumpkin	2	4	80	125	.64	40
Oregon	2	4	75	90	.57	36

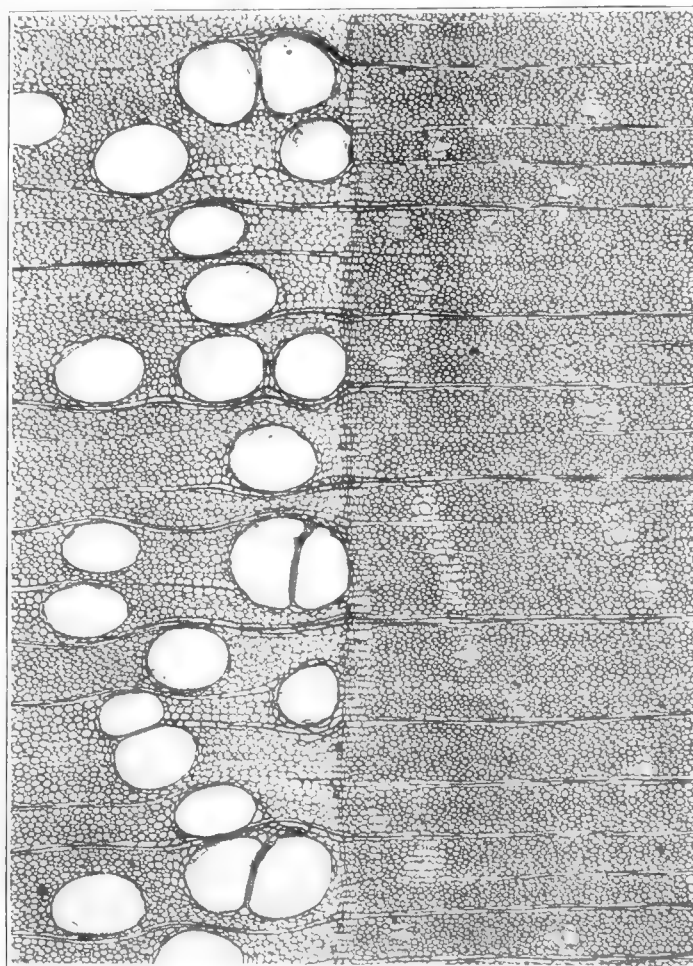
Structurally the wood of the ashes is decidedly ring-porous, the large and conspicuous pores of the early portion of the growth ring being collected into a rather broad zone of from three to ten (rarely one-half) rows in width. The pores in the summerwood are small and distributed singly, in groups, or in mostly short broken (occasionally continuous) more or less tangential lines. They are surrounded by wood parenchyma which often extends winglike from them, in many cases, uniting them into irregular tangential lines. It is in the comparative development of these lines that one looks for points of distinction between the woods of the species, though in some cases the color and weight of the material permits ready separation.

The true white ash (*Fraxinus americana*) is widely distributed throughout the eastern half of the United States, in mixture with other species on moist soil. The center of its production is the Ohio

valley. The tree grows tall, straight and free from branches, producing clear, straight-grained wood. The wood is hard, heavy, very flexible, but ultimately brittle, splits easily. The heartwood, which is light brown sometimes tinged with red, does not develop until the tree is seventy years old. The sapwood is nearly white and is lacking in natural luster but takes a high polish.

The growth rings are clearly marked by several rows of large, open pores, which in slow growth occupy nearly the entire width of ring, thus resembling black ash in weight and strength. The lines of pores in the summerwood are short and narrow, being composed of a few open pores and considerable wood parenchyma; they are most commonly found near the outer limit of the growth ring, though more prominently developed in wood of rapid growth. The lines are best seen with a hand lens magnifying ten to fifteen diameters, but can often be made out with the unaided eye.

The wood is used for wagon and carriage stock (poles, shafts,



GOOD PIECE OF BLACK ASH (*FRAXINUS NIGRA*)

Cross section showing a part of two growth rings. Note the large pores in a wide ring in the springwood, and the small, isolated pores in the summerwood rarely joined by wood parenchyma into lines. The relative width of summerwood to springwood is greater than usual in this species. Magnified fifty diameters.

frames, particularly in the form of bent wood), frame work of street cars, agricultural implements (handles and frames especially), ball bats, tennis rackets, oars, gymnasium bars, boats, furniture, cabinet work, interior finish, flour and sugar barrels, hoops, baskets, firkins, etc. It makes excellent fuel.

Blue ash (*Fraxinus quadrangulata*) derives its common name from the fact that a blue dye is obtained by macerating the inner bark in water, and its specific name because its twigs are four-angled and more or less four-winged. The tree is nowhere abundant and reaches its largest size in the basin of the lower Wabash river, Illinois, and on the western slopes of the Big Smoky mountains, Tennessee. The wood, which is not distinguished in the market from the true white ash, is as a rule heavier and harder than the other species of ash and takes a higher polish. The lines of pores in the summerwood are long, narrow, prominent, composed of abundant wood parenchyma and inconspicuous pores; they are usually well distributed. The wood is used for the same purposes as the white ash.

Red ash (*Fraxinus pennsylvanica*) is found on low moist soil near the banks of streams and lakes and, while quite widely distributed throughout the eastern half of the United States, is most common and reaches its best development in the north Atlantic states. Its common name comes from the color of the twigs and bark. The wood is very much like white ash though on the whole not so strong and valuable. It is always sold as white ash. The arrangement of the pores in the summerwood is almost identical with that of the less common blue ash, but the wood is not so hard or heavy.

Green ash (*Fraxinus lanceolata*) is by some authorities considered merely a variety of red ash. It is found along the banks of streams from the Allegheny mountains to the Rockies, being most abundant in the Mississippi basin. In the eastern part of its range it appears quite a distinct species, but in the West it grades into the red ash, so far as the appearance of the tree is concerned. The common name, green ash, is probably in reference to the lustrous bright green of both sides of the leaflets. The pores in the early wood are not numerous and are in a rather narrow zone, thus distinguishing it from the other species. The lines of pores in the summerwood are quite long and conspicuous and well distributed. The wood is sold as white ash and has the same uses.

Pumpkin ash (*Fraxinus profunda*) is found in deep river swamps often inundated during several months of the year, in southeastern Missouri, eastern Arkansas, and the valley of the lower Appalachicola river, Florida. One of the most prominent features is the much enlarged and buttressed base so characteristic of tupelo. The wood is rather soft, brashy, and brittle and not fitted for the exacting uses to which white ash is put. The common name probably refers to the comparatively soft character of the wood in the same way as pumpkin pine is applied to soft, homogeneous old white pine.

Black ash (*Fraxinus nigra*) is a tree of the northeastern quarter of the United States, especially in deep cold swamps and the low banks of streams and lakes. Its name refers to the dark color of the heartwood. It is also known as brown ash. The wood is lighter in weight, softer and weaker than white ash. The pores in the springwood are in a very broad zone, commonly making up one-half or more of the growth ring. This accounts for its lessened weight and strength. The pores in the summerwood are isolated, few, large and rarely joined by wood parenchyma, thus distinguishing the wood from that of the preceding species. The wood is extensively used as core for veneers as it glues well. On the market it is usually considered merely a poor grade of white ash. The darker color makes it considerably less perishable in contact with the soil than the wood of the other species.

Oregon ash (*Fraxinus oregona*), while nowhere abundant, is most

common and reaches its largest size on the bottom-lands of the rivers in southwestern Oregon. It also extends into California and Washington. Because of the scarcity of hardwoods in that region it is highly prized for many purposes such as handles, furniture, interior work, fixtures, vehicles and saddles. The wood is pale brown, quite hard and strong, rather light, tough and resilient. The sapwood is nearly white, but usually with a reddish tinge. In structure the wood is more like black ash than white ash. The pores in the springwood are in a zone of medium width, commonly composing one-third of the growth ring. Pores in the summerwood appear as though subdivided radially into two to five, and near the outer edge of the ring are somewhat tangentially grouped. The ray cells are larger than those of black ash. About one-half million board feet of Oregon ash lumber is consumed annually in Oregon and is worth from \$28 to \$60 per thousand feet.

There are few woods which resemble ash even superficially. Chestnut has somewhat the general appearance of black ash, but is darker colored and coarser textured. If examined closely it will be noted that in chestnut the small pores in the summerwood are in radial lines branching more or less toward the outer edge of the ring, while the wood parenchyma is in fine tangential lines. This structure is quite distinct from that of ash.

Sassafras is sometimes confused with black ash, but if smoothly cut cross sections are compared it will be readily seen that the rays of the sassafras are much more distinct, and

that the pores in the summerwood are in more numerous small groups than in ash. A fresh cut surface of sassafras usually gives off an aromatic or spicy odor that is quite characteristic. The sapwood is thin and distinct, while that of ash is thick and often the boundary line between it and the heart is not clearly defined. If a radial section is examined under a compound microscope the ray cells of ash will be found to be all alike, while in sassafras some of the marginal ray cells are very large, ovate or round.

The waxy exudations from the trunk and leaves of a certain ash (*Fraxinus ornus*) of southern Europe and Asia Minor furnish the manna of commerce used in medicine as a gentle laxative; and the Chinese white wax is obtained from branches of species in eastern Asia.

S. J. R.



RADIAL SECTION OF SASSAFRAS

Note the peculiarly developed cells on the margin of the ray which crosses the middle of the section. Magnified fifty diameters.

Hardwoods Used for Matches

In Germany, most of the four-sided matches are manufactured from veneer sheets of linden (basswood), cottonwood and willow. Rather extensive experiments have been made to determine the adaptability of other woods for the purpose. These consisted for the most part of taking four-sided matches and noting the time they required, when placed horizontally, to burn down to one inch, both with and without paraffin impregnation.

Without paraffin the duration was longer in hardwoods than in conifers, the flame more even and less sputtering, which in conifers makes it necessary to turn the match to prevent its extinguishment. Impregnation with paraffin hastened the progress and illuminating power of the flame by from four to six seconds, on the average. With such impregnation the following scale, gauged by duration, luminosity and size and regularity of flame, i. e., quality, was obtained: linden, cottonwood, willow, yellow poplar, alder and walnut. Of the conifers the white pines gave best satisfaction, as they threw fewer sparks and spluttered less than the others.

When the auto people want the best thing for spokes they hunt wood. That's a good way to get the best things for bodies.

You can spoil your trade by shipping stock that is above grade just as easily as you can spoil your reputation by shipping stock that is below grade. A grade is a good thing to stick mighty close to.



The "Good Will" Emissary



It is generally agreed by business men, as well as by students of economics, that good-will is the most important asset of a commercial institution. In some cases good-will is represented principally by trade-marks or trade names which have become of such familiar use that the public demands articles by that name without knowing that they are asking for the product of a single concern. "Kodak" and "vaseline" are examples of trade names which have attained a place in the common vocabulary and are now immensely valuable to their owners and a stumbling-block for competitors.

But good-will means more than the value residing in the continued use of a trade name. It means the accumulation of interest on the satisfactory transactions handled by a concern until the favorable opinions held by its customers assume almost a tangible and measurable force. Certainly the result of honest dealings and right treatment of one's patrons is sure to be felt at one time or another in the development of good-will, or the lack of it. The average lumberman must store up good-will not in a trade name but in his own name, which, to be of value as a business asset, must stand for the square deal and for the correct practice of the principles upon which every trade and calling is based, even if only in theory.

The development of good-will, then, may be conceded to be of importance to the lumber concern, just as it is to the manufacturer of breakfast food or talking-machines. How to develop it is another question. The answer may often be found in the most effective use of the selling organization of the house, as well as in the proper care of the orders placed with the concern by its customers.

The value of the salesman from this standpoint is of special interest just now when business is good and when many concerns which have sold up to the limit of their supply are planning to call in their representatives and withdraw themselves from the market. It is a question as to whether this is good business policy. Apart from the fact that the salesman is one of the best possible advertisements that a concern can have, and that the lumber firm which is not represented in the markets where its product must be sold is likely to be speedily forgotten, it must be remembered that the able representative of the company in the selling field does more than merely take orders—he is creating good-will.

This idea was exemplified recently in the East during the anthracite shortage. It was noticed that the big operators did not withdraw their salesmen, even though they were unable to accept business for immediate delivery. It appeared to be an unnecessary expense to keep salesmen on the road if they could not actually sell, and to be taking money out of the profits account and putting it into the expense account without any satisfactory reason. But there was a reason, and it consists of the idea developed above, that the business concern, in order to maintain pleasant relations with the people with whom it has dealings, should not suffer the personal connection between them to be interrupted or broken, even temporarily.

A spokesman for one of the anthracite concerns put it this way:

"For years past our salesmen in eastern territory have been used largely for the purpose of keeping in touch with the trade, rather than striving for orders. This policy is regarded as a wise expedient, since it practically eliminates credit losses and serves for gathering much useful information up and down the line. We expect to keep our salesmen in active service constantly, even though orders are coming in freely. Sometimes the unsolicited order is very properly the subject of investigation, which can be made more appropriately by the salesman in charge of the territory from which the order comes than anyone else."

As it happens, additional evidence of the value of the salesman from the good-will standpoint was brought to the attention of the writer recently when a manufacturing concern, not in the lumber business, remarked upon the advantages of the plan it uses of sending to each salesman a copy of every letter that is sent to a buyer in his territory. This is done not so much that the salesman

shall thus be made more efficient in order-getting, although this result is realized; but so that the representative of the house in the field shall be in the best possible position to look after matters affecting the business of the customer.

In the lumber trade salesmen frequently dodge the disagreeable duty of calling on concerns to whom they have sold lumber, for the purpose of settling kicks. The reason they assume this attitude is not merely because of a distaste for performing what is always a distasteful duty, but for the reason that the lumber concern frequently fails to carry out the agreement made by the salesman with his customer. Some lumbermen complain that their salesmen are too often inclined to take the part of the customer when a complaint comes up; and while it may be true that sales representatives should lean towards their employers rather than in the other direction, it can hardly be affirmed that this should be the case in every instance. If a lumber salesman promises one thing, and puts it down in black and white, and his house does another, it is putting more than a small burden upon him to tell him to go see the customer and "straighten the matter out." And certainly he is not in a fit position to create much good-will.

Many of the errors that are developed in the handling of lumber business are the fault of misunderstanding in the office or the yard. The salesman may fail to express himself as explicitly as he should have done, and may have assumed that his house understood the details of the requirements of the customer as well as he himself did. Thus honest mistakes may have occurred which appear inexcusable to the purchaser of the lumber, and which would have been avoided by the use of the plan mentioned above, that of furnishing copies of the correspondence passing between the house and buyers to the salesmen interested.

The salesman who is earnestly endeavoring to serve his employer and build up good-will by serving the customer as well—performances which in the light of modern business ideas are not at all incompatible—is unquestionably handicapped by occasional interference by the office with arrangements which have been made with the customer. No man of spirit likes to have business go "over his head" when it should pass through his hands, especially when it comes to a matter affecting one of his customers, since the salesman who is made of the right stuff feels a sort of proprietary interest in the people who buy from him, and rightly so, for his personal connections are in effect the good-will which he himself has to sell when he puts his services on the market to be sold to the highest bidder.

Hence the friction that occurs between the salesman and the office and between the concern and the customer, when the salesman fails to be given an opportunity to explain his end of it. Perhaps he made a verbal agreement with his customer that there should be a certain percentage of long lumber in a car which had been ordered. If the salesman forgets to put this into the contract and the lumber is shipped without the required percentage, the consumer has a right to feel that the policy of the square deal has not been carried out; while the office, on the other hand, has a good legal right to object to a complaint based on a condition which was not inserted in the contract.

If the salesman who made the agreement, knowing the price at which the lumber was to be sold, was permitted to explain that he had promised the extra lengths, the company would doubtless find it good policy to deduct a sufficient amount from the face of the bill to make up for the failure to include them, since the price was doubtless sufficient to take care of the cost of the special dimensions.

If the customer happens to be a difficult person to deal with, and has to be "handled with gloves" by the salesman, the latter knows that an order to deliver on the fifteenth does not mean delivery on the first preceding nor the first following, and is the best judge of whether a car of lumber the firm is specially anxious to get rid of ought to be unloaded on the consumer without more

formal notice than a line to the effect that "we are this day shipping you car 90178," etc. If a letter of that kind were to be mailed, with a copy going to the salesman, the latter would have a chance to get to his customer, explain that a mistake has been made and settle the questions before, and not after, the irate buyer had a chance to unlimber his batteries against the house.

There are scores of occasions in which permitting the salesman to see the correspondence would not only aid in reducing the friction which seems inevitable in the operation of a business of any size, but would give the men on the road a chance to be real business-builders in the sense of building up the good-will of the concern in the

mind of the customer, since good-will is a purely mental proposition.

The fact that the salesman supplies the missing link between buyer and seller in the form of personal contact, which can be made the most effective lubricator of the wheels of business, seems to suggest that the statement which is occasionally heard from those who have set "efficiency" up as the only thing to be striven for, that the salesman will one day be eliminated when the machinery of distribution is more nearly perfected, is not likely to be realized. Perhaps the day may come when he will not be called the salesman, but will be an ambassador extraordinary. But even then he will sell the firm itself, if not its products.

G. D. C., Jr.



Tests of Structural Timbers



Bulletin 108 has just been published by the United States Forest Service. It was prepared at the government laboratory at Madison, Wis., by McGarvey Cline and A. L. Heim, and deals with the strength and seasoning of wood. Much of it is strictly technical, and is of interest chiefly to architects and engineers; but certain points are of value to any one dealing with timbers of large sizes, or lumber of any size.

It is shown that small pieces of a wood, as they are used in practice, are proportionately stronger than large beams. The reason for it is that a large beam is liable to have more defects, in proportion to its size, than a small stick. In other words, it is more difficult to find a large, clear beam than a small, clear piece. Defects govern the strength of timbers in most cases. A beam is no stronger than its weakest point, and a knot or a check may make one point much weaker than another. When a large and a small piece are both clear, and other things are equal, they are of the same strength, in proportion to size.

The bulletin gives interesting data in regard to the moisture in wood. Measurements were made of the amount in different parts of heavy beams, that is, the outer shell, the intermediate part, and the center. They were tested both green and air dry. The following table, compiled from figures in the bulletin, gives the moisture in percentages of the dry weight of the wood. For example, if the center of a green longleaf pine beam shows thirty per cent moisture, it means that the contained water weighs thirty per cent of what the air-dry wood will weigh. The width of beams tested was twice the thickness, that is 8 by 16 inches.

MOISTURE CONTENT OF BEAMS 8x16 INCHES IN PERCENTAGE OF DRY WEIGHT OF THE WOOD.

Species—	Outer portion—		Intermediate portion—		Central portion—	
	Green.	Air-dry.	Green.	Air-dry.	Green.	Air-dry.
Longleaf pine	23.4	17.2	28.6	19.1	30.8	21.2
Douglas fir	32.1	14.4	33.3	17.8	34.1	19.7
Shortleaf pine	59.4	13.9	45.5	16.5	34.4	17.3
Western larch	44.0	15.3	54.5	18.2	55.4	20.1
Loblolly pine	31.5	16.4	36.0	18.1	35.7	19.3
Tamarack	37.8	16.3	43.2	19.7	45.0	28.4
Western hemlock	46.9	16.4	48.4	17.8	47.4	19.0
Redwood	82.5	15.8	89.1	21.2	91.	25.7
Norway pine	63.7	15.4	43.8	15.6	39.4	16.0

In general, timber 8 by 16 inches must season through two entire summers before it reaches a thoroughly air-dry condition. If seasoning is started in the hot summer months, the loss of moisture at first is very rapid, even though the timber is protected from sun and wind. The loss in weight in a stringer 8 by 16 inches, and 16 feet long in three months varies from forty to sixty pounds, the loss being proportioned in a general way to the amount of sapwood, which often contains much more water than heartwood. Checking is less serious when the timber contains a considerable amount of sapwood than when it is all heartwood.

The heartwood of each species of timber has a characteristic color, due to the presence of gums, tannins, and other substances due to the process of growth. Coloration from such causes apparently does not affect the mechanical properties of the timber; but marked variation from the characteristic color often indicates incipient decay, particularly when it produces a streaked or spotted effect. Some

fungi which produce stain do not injure the timber, because they live on the organic matter contained in the sap and do not attack the cell walls. Many of the blue stains noticeable in sapwood are from this source.

Sapwood, except from old, over-mature trees, is as strong as heartwood, other things being equal. It is not apparent that the position of the pith in timber bears any relation to the strength of the timber, but checks developed on account of the position of the pith may affect the strength. It was shown by the tests that the mechanical properties of a wood vary directly with its dry weight, and, other things being equal, the heavier the timber, the greater its strength.

The presence and position of knots in timber are a great source of weakness, and it is not unusual for the presence of a knot in a beam to lower its strength more than half.

Burls are described as "local disturbances in the grain of the timber, usually associated with knots or produced by the healing of wounds during the life of the tree."

Forests in Chile

In view of the interest which many lumbermen are taking in South American forests, the following statements, condensed from a recent consular report, will prove interesting:

The estimated area of Chile's natural forests is about seven million acres, and in addition there are about thirty thousand acres of planted forest. The Chilean government is taking measures to stop the destruction of timber, and to plant trees in certain arid regions where little wood of any kind exists now. The forested area of Chile is about one-half that of West Virginia.

Most of the Chilean timber is very heavy and will not float. This has stood in the way of operations in the interior where railroads are few. At present there is no prospect of more railroads through the timbered regions. United States dealers last year shipped 34,000,000 feet of lumber to Chile, and paid import duties on it amounting to \$20,000.

Utilization of Timber in Mexico

The Sierras which traverse the western part of the state of Durango, Mexico, are plentifully wooded on both east and west exposures. While pine is the most important of the tree species, there is a considerable quantity of cedar, oak and other hardwood, while far down on the Pacific slope there are many valuable cabinet woods. In all there are thirty-six separate and distinct varieties of timber noted in the timber production statistics of the state.

The timber area of Durango is approximately 6,250,000 acres which has been scarcely touched on account of lack of transportation. New railroads either actually being projected or under consideration will open up this vast territory to exploitation. Some of the best timber tracts in the state will be made available, which will mean that Durango will be one of the most important lumber producing states in the northern part of the Republic. The industry at present is entirely local.



A WOODLOT FROM WHICH THE BLIGHT-DAMAGED CHESTNUT HAS BEEN CUT INTO CORDWOOD



Uses for Blight-Killed Chestnut



In a recent issue of *HARDWOOD RECORD* a number of uses for blight-killed chestnut timber were discussed. To that list should be added several others of considerable importance. The damage already caused by the disease is so great that every reasonable effort should be made to salvage as much of the material as possible to prevent its waste. Everyone has been hoping that the blight would not penetrate the valuable southern forests of chestnut, but recent investigations disclose that it is rapidly gaining a foothold there. So far as known no plant has ever been exterminated by disease and it seems unlikely that chestnut will be exterminated. On the other hand the history of this blight is unparalleled in the annals of plant pathology and no one can predict the outcome. The menace is so great that every owner of chestnut trees should be thoroughly alive to the situation and take such steps as will best protect him from unnecessary loss.

On account of its durability, chestnut is well suited for piles, posts and rails. In southern New England piling is sold by the running foot to an upper diameter of seven inches. Twenty cents per running foot is the common selling price for forty to forty-five-foot piles. Specifications for chestnut fence posts usually call for material sound and free from shakes and rotten knots, seven and a half to eight feet long, with six inches top diameter, and with bark removed. They sell for from fourteen to thirty-five cents a piece, depending on the demand. The average life of a chestnut post is ten years, exceeding that of white oak and being about half as great as locust and Osage orange. Posts treated with creosote last twice as long. Railing sells for about three cents per running foot, delivered along the road. It is used to a diameter at the smaller end of about four inches.

Nearly two and one-half billion board feet of timber is used every year in the United States in connection with mining. Chestnut is well suited to this purpose because of its durability, and as Pennsylvania leads all other states in the use of mine timbers it is

apparent that a good market is at hand for much blight-killed material in event the disease becomes virulent in the western part of the state. Sound dead timber is just as good for this purpose as timber cut from live trees. Props and posts are from six to ten feet long and have a cross-sectional area of not less than sixteen square inches at the top. Timbers may be used in the round or sawed. The average life of a chestnut mine prop, so far as decay is concerned, is five years, equalling white oak. Where treated with creosote the life is considerably more than doubled. Ties for mining trams are mostly five feet long and vary from four to six inches in width and thickness.

While a large amount of chestnut wood is used for fuel, as a rule the sale price barely covers the cost of getting it to market. The cost of cutting the green wood is about ninety cents per stacked cord of four-foot wood. Dead material is harder to cut and the cost is increased accordingly. The selling price varies from \$3.00 to \$4.25 a cord. For ordinary purposes chestnut is not prized as a fuel as the wood is light and burns up quickly; it crackles and throws sparks too much for open fire places. If split fine it makes excellent kindling. In some localities there is considerable demand for chestnut for use in lime and brick kilns. In places where there is no market for cordwood the small-sized material can often be made into charcoal at a small profit. While the returns are in no case large they do afford a fair wage at a time when other employment is slack.

For the annealing of brass no other wood has been found so satisfactory as chestnut. The brass bars or plates are placed in a furnace so as to be exposed to the direct flame of the burning wood. If hard wood like oak is used the fire is so hot that there is great danger of burning the metal, while soft woods like pine contain so much resin that the resulting soot blackens it so much that subsequent cleaning is very difficult. In localities where there are no chestnut trees pine, especially the refuse from box factories,

is used, but the process of annealing is more difficult than where chestnut is used. Attempts to substitute oil have only recently proved successful, and because of the greater ease of controlling the temperature it is probable that oil will largely supplant wood for this purpose in the future.

In the Naugatuck valley in Connecticut the brass industry is very important and large quantities of cordwood are consumed. It is a common practice for the operators to buy up large tracts of sprout woods and cut them over for cordwood, all sizes being taken. In buying from farmers, only chestnut is wanted though small quantities of other woods are sometimes permitted. The companies sometimes find it profitable to sort out oak and hickory for sale in the towns. The use of chestnut for fuel fortunately permits the disposal of small-sized and poorly formed material for which there is no other market.

It is important that owners of blight-killed or threatened chestnut utilize it before it deteriorates. Spare time in winter can profitably be devoted to cutting the largest and best trees into logs, the tall and slender ones into poles, others into ties or such other products as the market requires. Pole cutting is much the simplest and cheapest form of exploitation per unit of volume. It consists simply of felling the tree, sawing off the top to an inside diameter of seven inches, trimming the branches close, and peeling. The cost of this is usually figured at one cent per foot in length for poles from twenty-five to thirty-five feet long and thirty-five cents apiece for lengths between thirty-five and fifty feet. Pole cutting of green timber is more expensive in winter when peeling is more difficult, but most companies prefer winter-cut poles on account of their reputed greater durability. The number of poles which can be hauled at a load varies from six of the twenty-five to thirty-foot size to one of the fifty-foot length. The selling price increases rapidly with the length. In southern New England a twenty-five foot pole brings from \$1.75 to \$2.00; forty-foot, \$5.00 to \$5.75; fifty-foot, \$8.00 to \$10.00 apiece, while a sixty-five foot pole is worth \$20.00. Formerly buyers specified that poles should be cut from green timber, but most of them are now accepting blight-killed material if it is in good condition.

The cost of tie-making varies chiefly with the distance of haul, but also with the method of manufacture. To hew chestnut ties usually costs from nine to ten cents apiece, depending on whether hewed on all four sides or only two. In the latter case the bark has to be peeled off. From twenty-five to forty ties, depending on the character of the haul, make an ordinary wagon load; usually about thirty-three first-class or thirty-eight second-class ties can be hauled at one trip. A first-class tie is eight feet long, six inches thick and with a six-inch face; a second-class tie has only a five-inch face. Usually not over ten per cent of the latter are acceptable in a delivery. The usual selling price of first-class chestnut ties is fifty cents apiece delivered along the track, but in some places it has dropped to forty-five cents. Second-class ties bring about thirty cents apiece. For extra length ties as for switches special prices are paid. From these facts the owner of chestnut should be able to figure out approximately the returns from such timber as he may wish to convert into ties.

Large trees should usually be cut into lumber. The farmer can usually do his own logging during the winter months and small portable mills can be engaged to do the sawing. Mills such as

these can ordinarily be moved for from \$40 to \$50 and a stand of 50,000 to 75,000 feet will warrant a set-up. The cost of sawing will vary from \$2.50 to \$4.00 per thousand board feet, while cutting, skidding and piling will require from \$3.75 to \$5.00. With these figures as a basis the owner can calculate the probable cost of the lumber and by comparing it with other products determine what course will afford the best returns. Chestnut lumber properly piled and protected may be kept for a long time if considered desirable on account of market conditions.

S. J. R.

Tree Fern Columns

Shown in the accompanying cut are two columns, each of which was manufactured from the trunk of a tree fern from ten to sixteen feet high and about ten years old. They came from the heights of Fort de France, from the place called "Balata," near the Pitons du Carbet, Martinique, French West Indies. They show ash-colored marks from volcanic cinders which have penetrated under the action of the rain into the fibrous tissue of the tree. The columns have also been pierced with vines, the exposed light-colored wood of which shows in contrast with the dark brown of the fern.

The tree fern (*Fougère arborescente*) grows in great quantities in the forests of the island of Martinique, especially in damp places and at a considerable altitude, where it attains a height of from forty to fifty feet and sometimes more. The trunks of these trees, when old and fully seasoned, are cut square and used as posts for arbors, or as piles, or as beams for houses in the country. When fully matured it is a very durable wood, and is considered incorruptible when exposed to humidity.

Some artisans fashion from the roots flower pots and various novelties which are more or less artistic, and have, as a rule, an original style of their own.

The newspapers announce that muckraking is going out of fashion, but, since they didn't use wooden rake handles anyway, the handle trade still prospers.

If the south pole were only a good hickory tree, some handle man would bring it in before the winter is over, for there is a great scouting for hickory handle timber.

Unless the car builders make a pretty strenuous demand for car stock this winter, there will not be much excuse left for the railroads when another car shortage arrives.

They are making a sort of houn' dog of our real quartered oak by calling the printed imitation "American" oak, and it's about time for the dog to turn.

There never was a time when the chances were better for getting the right kind of price for small dimension stock. It is simply a matter of getting at it right.

There may be some pumpkin ash, but there is some other ash that is some pumpkins right now, too.

Maybe the worm holes were made in chestnut so that it would be saved for body work in veneering.

When the discriminating builder wants real quality in interior trim for anything from floors to picture molding, he calls for hardwood.

A few more planers at the hardwood sawmills would save some freight and help sell some lumber at a higher price.

Oak casing and base should make good items to go with oak flooring.



TREE FERN COLUMNS FROM MARTINIQUE

Varying Problems in Production

It is a truism in business that the thing that works well for one man may be a colossal failure for another. It is equally true that the system which is a success in one sawmill may fall down flat somewhere else. It's all in the individual conditions, of course—but it takes a kind of genius to determine which are the essential factors bearing on a given proposition.

For instance: One of the leading hardwood manufacturing concerns of the country had a big sawmill in Tennessee. Its production was large and as a means of reducing handling costs in the yard its engineer devised a system of tramways by means of which distribution was accomplished more quickly and economically than was possible under the old system. The lumber was put on trams, shoved out on the tracks to the piles, stacked and disposed of in so short a period that the old scheme seemed hopelessly out of place. The idea was really a great success, and the saving made in handling expenses was more than enough to make the investment in the tramways a profitable one.

Not only was the plan successful when it came to handling, but also in loading. The tramways were built between rows of piles, so that lumber was stacked on each side of the tram, with the rear toward the tramway. Between the piles were railroad tracks, which meant that as soon as the material was ready for shipment it could be handled directly into the car. Taking it from first to last, there were just two handlings, from the saw to the pile and from the pile to the car. Under the old system this is the nominal number, but as a matter of fact it is from the truck to the pile, from the pile to the truck and from the truck to the car. And the latter is slower, more expensive and much more time-consuming.

The same company decided to erect another sawmill a little further south. The mill was to be one of the finest in the whole hardwood country, and the engineer who had worked out the tramway idea was told to go ahead and build a mill that would stand any kind of criticism. He did. He put up a reinforced concrete, steel and brick structure that from an engineering standpoint as well as the practical view, was a model. It was so substantial in construction that there was no danger of excessive vibration of the machinery producing imperfectly cut lumber, and the materials going into the building were not combustible, so that it was unnecessary to insure against fire.

The sawmilling machinery was placed on the second floor, and, carrying out the idea which had proved successful at the other plant, tramways leading from the mill into the yard were constructed. The mill floor was about fifteen feet above the ground, and this height was maintained in planning the platforms and carrying tracks. The same plan of distributing lumber to stacks on each side of the tramway, with railway tracks in between so as to enable lumber to be loaded directly into the car, was used as in the other plant. This feature was made a good deal of, and apparently rightly so, since it had been one of the prime causes contributing to the success and economical operation of the other plant.

A few months ago the manager of the second mill got an o. k. from the president of the company on an order to tear out the tramways and go back to the discarded system of distributing by teams and trucks. The scheme, which had looked so good on paper, and which had been a practical success in another plant, had failed. Why?

In the first place, consider for a moment the nature of the two businesses. The Tennessee mill was making principally gum, cottonwood and ash, as well as oak. It was shipping practically its entire cut to a large consuming factory with which it had connections. Owing to the uniform nature of the product of this factory, all of the lumber cut at this mill, as a general rule, was of one thickness.

The second plant was intended to manufacture lumber for general sale. Oak was the chief product manufactured, though there was some gum and a little ash. In view of the nature of its business, thicknesses had to be varied to suit the needs of the consuming trade.

When it came to using the system which had proved successful in the first instance, it was found that the very difference in the character of the chief product turned out was a big obstacle in the way of the success of the plan. Oak is much heavier than cottonwood or gum, and when the sawmill man began stacking his oak 150 courses high, and getting it up twenty-five or thirty feet off the ground, trouble was the sequel which followed quickly. The great weight of the lumber stacked on the lower courses caused uneven shrinkage in seasoning, and checks and cracks developed almost as a matter of course.

In the other mill the ability to pile lumber high, involving as it did a smaller outlay for the construction of foundations for piles—which in this instance are of concrete and very expensive—was one of the chief economies secured. The foundations were just twice as good an investment as when the piles were half as high. But the excessive weight of the oak knocked that plan into the proverbial cocked hat, and it was seen that it would be impossible to use the extreme stacking methods which had been successfully practised before.

Another feature which was soon brought out was that oak, especially thick stock, dries slowly, naturally, and needs every facility for seasoning that can be afforded. With tramways fifteen feet high back of each pile, a shadow was cast on at least half of the lumber for a considerable portion of the day. This appears to be a small factor, but in practise it meant the consumption of much additional time in the seasoning of the lumber, involving an investment charge on the stock thus tied up. And that was another black mark against the system.

Another difference which obviated against the success of the plan was the fact that owing to special orders being taken care of, it was often necessary to lay out boards which did not belong in a given car. Then it was discovered that there was no place to put this material. The piles had been built closely together, with the tramways back of them and the railway tracks between, and there was simply no provision for the disposal of lay-outs. This proved a big inconvenience, since it meant that these boards had to be passed up to the platform above, placed on trams and carried to some other pile. The old-fashioned way would have been better here.

Another point that came up was in the distribution of the various dimensions. In the old plant the tramway had been designed to take care of the piling requirements of a mill cutting practically nothing but inch stock. The tramways and the pile foundations were laid out accordingly. In the new plant there was a great addition to the number of piles needed, owing to the additional number of thicknesses cut, and the tramway system, elaborate as it seemed, was not sufficiently extensive to take care of all the requirements of the mill. This made for confusion, since the lumber had to be handled in some fashion, and as provision had been made only for tramway handling, the cost of taking care of it in any other way was excessive.

A disadvantage which was more apparent in handling heavy oak lumber than in relatively light cottonwood was the extreme height of the piles. It had been figured that much labor would be saved in distributing lumber from tramways fifteen feet off the ground, because gravity would assist in the operation, and it is easier to load lumber down than up. But when it came to taking down a thirty-foot pile of lumber, the difficulty of handling it increased enormously, and several more men were needed for the job than are required in a yard laid out in the usual way. Consequently the prime advantage turned out to be a disadvantage.

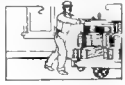
Thus a plan which in theory is most excellent proved in practice, "the acid test" of theories, to be ill-suited to the special requirements of a new operation. It would be going too far to say that the differences in the situation should have been taken into account and the difficulties thus created anticipated, for there was no reason to believe that apparently minor questions such as a difference in the weight of lumber, variation in thicknesses and a slight alteration

of selling plans would cause a system which had shown its value in one plant to fall down in another.

The experience of this concern, which is one of the most progressive in the business, merely emphasizes the fact that is often overlooked: that success is like genius in that it is a matter of taking pains and of studying details. Broad principles of operation are all right

as a general guide, but it is a dangerous matter to attempt to apply them to individual propositions, until an analytical study of the situation has demonstrated beyond question that the two fit. Making a plan and then running your mill by it, instead of building a plan to suit the mill, is a good deal like buying a \$9.99 suit; there is likely to be a misfit.

G. D. C., Jr.



Willow, a New Substitute Wood



When beech came into use among the hardwoods of the northern forests and tupelo in the South, it was generally supposed that the last important substitute woods had been found. However, there was another to come in, and it is now coming. It is the black willow.

This is not a new tree lately discovered. It is familiar to most people who are acquainted with forests, and it is generally called willow without a qualifying term. It has been customary with most people to think of all species of willow as practically the same and nearly worthless. No good reason could be given for distinguishing one species from another. Few persons, even among those fairly well posted on the different kinds of trees, took the trouble to distinguish the willows.

Twenty odd species are native in the United States, besides several foreign which have been introduced and are running wild. About half of these develop trunks large enough to be called trees, but most of them do so only under most favorable circumstances.

Black willow (*Salix nigra*) is the largest of all native willows. It may attain a height of from eighty to one hundred feet and a diameter of six, but that size is unusual. Heights of from sixty to seventy feet and diameters from two to three are fair averages of mature trees, but such sizes are reached only where conditions are favorable.

Its range covers the eastern half of the United States, including the whole Mississippi valley westward to the semi-arid regions. It extends west into Texas, flanks the Rocky mountains by passing into New Mexico and Arizona, and thence northward six hundred miles to central California.

It reaches its highest development in the lower Mississippi valley, including the lower Ohio. It is not a swamp tree to the extent of cypress and tupelo, but it does best in wet, fertile land. Occasional overflow helps rather than harms it.

Dry black willow weighs 27.75 pounds per cubic foot. That places it in the weight class with yellow poplar. It is rather low in strength and elasticity. The wood is very porous, but the pores are exceedingly small. It splits with difficulty, and nails easily. The wood varies in color, but if dry is generally brown, with a tinge of blue. When freshly cut it is often quite blue, or it may be nearly black; but the color soon changes to a brown. The blueness does not appear to be the result of fungus, however an expert report on that matter has not been made.

The rapidity with which willow is coming into use is shown by figures of output. The federal census for 1908 gave the sawmill cut of this wood in the entire country at 302,000 feet, with Pennsylvania and Mississippi as the largest producers. Three years later Louisiana alone was credited in a wood-using report with a cut exceeding 6,000,000 feet. A report of fence posts in Iowa in 1909 credited willow with 88,113, but posts are not a new use.

The rapidity with which willow is coming into use is due to its fitness for many purposes. It reaches northern markets in large amounts, as much as 200,000 feet in a single shipment, and it goes also to other markets. Thorough tests of its suitability for panel cores in piano making have been made with results highly satisfactory. It is further contemplated that it will be used as back and bottom boards for pianos. It shows no tendency to warp at any time. One concern which employs it as panel cores uses stock twenty-seven inches wide, which affords a pretty severe test. A shipment of willow lumber was recently made averaging eleven inches wide. Trees are not only large but usually are sound. They frequently have trunks of clear

lengths thirty or forty feet. A large shipment recently showed 50,000 feet No. 2 common and only 6,000 feet No. 3 common, while 150,000 feet were the better grades.

A large mill in Louisiana rafts its willow logs down the Mississippi from points above. Its yard contains numerous willow logs from two to three feet in diameter, and some four feet. Many of them are as sound and smooth as yellow poplar. When the lumber cut from stock like that is thoroughly seasoned, its shipping weight is from 2,300 to 2,500 pounds per 1000 feet. It is, therefore, an economical wood from the freight standpoint.

Under favorable circumstances the growth of black willow is probably equal to that of any other American timber tree. Instances have been cited, apparently on good authority, of willow stands on some of the abandoned cottonfields in the Mississippi flood plain, which have produced 100,000 feet of willow logs per acre in sixty years. That is, of course, more than can be expected under ordinary conditions, but it shows what the possibilities are for this wood which is just now attracting attention because of its many excellent qualities. It is known to exist in rather large amounts in many parts of the country; and the rapidity with which it grows assures it a place in future supply. The abundance and lightness of its seeds favor natural planting in all vacant spaces within considerable distances of trees. It is largely a waste land species, which gives it additional value.

The history of the uses of black willow fully uphold the claims now made for it. Two hundred years ago willow planking for small boats was used because it was a wood which resisted dints and bruises without splintering. The same quality today gives it a place in the manufacture of baseball bats and other athletic goods.

Before labor-saving machinery had so largely replaced hand labor, willow was in almost universal use as lapboards and cutting boards by shoemakers, cobblers, and harness makers, first because it was light, but chiefly for its peculiar and spongy softness. It did not dull the workman's knife, nor was the surface of the wood scarified or chipped by the use of the knife on it. That identical quality is still valued by artisans who use cutting tables.

It is one of the best woods for ironing boards, sleeve boards, and others where heat is applied to the surface, for it will not warp, check, or split in high temperatures. Its ability to resist intense heat has long been known. That it is difficult to burn seems strange, because willow charcoal is the best known for gunpowder and the value of the powder is due to its quickness to burn. The first railway trains used wooden brake blocks, and experience showed willow to be the best, because it was almost impossible to set it on fire by friction, while most other woods quickly kindled into blaze when brought in contact with revolving car wheels.

Wooden brake blocks are no longer used, but willow's resistance to heat still creates a demand for it. The thick wooden-soled shoes worn by workmen in rolling mills and glass factories, who must stand on hot floors, are usually of willow; and the wheelbarrows which carry ore, ashes, and other material to and from the doors of red-hot furnaces are of willow, because it can stand fiery ordeals which would char or kindle into blaze most other woods.

It is one of the best materials in this country for wooden shoes. Persons unacquainted with that industry would be surprised to learn how many wooden shoes are made and worn in the United States. They are literally sold by the cord in Chicago and other large cities. In Europe alder is considered the best material, but in this country

willow heads the list, in quality of wood if not in quantity. It meets two requirements—it is light, and is waterproof. Though willow wood contains tens of thousands of pores to the square inch, they are too small for water to pass through, and at the same time they make the wood light.

Slack coopers know the value of willow for staves. The quantity used in 1808 was about four and a half million in the United States. A large part went into flour barrels.

Willow's resistance to checking leads to its employment by the manufacturers of such woodenware as bowls, scoops, ladles, large spoons, and trays.

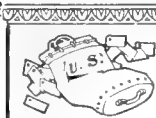
It was formerly much used for wagonbox boards and is still occasionally so used. Such boards are practically indestructible, as might be expected of a wood which does not splinter, warp, check, and wears out very slowly. Yellow poplar and cottonwood supplanted willow to a large degree years ago, but they are now much higher in price than willow, in grades suitable for that use, and willow is likely to come back to the wagon factory.

Probably the largest use of black willow is for shipping boxes. Meat packers of Chicago, Kansas City, and Omaha are the largest buyers. The box shooks are made in the lower Mississippi valley, and the willow often passes under the trade name "brown cottonwood."

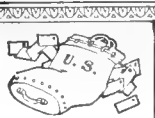
Experiments in staining willow in imitation of mahogany have been successful enough to render it probable that this opens a new field for willow in furniture filing cabinets, interior finish, bank and office fixtures, and for many other commodities.

What makes the study of uses of willow particularly interesting is the fact that it grows very rapidly, flourishes in many parts of the country, is a waste land tree, and will plant itself naturally, quickly, and abundantly. It is not one of the species now on the decline with the end in sight.

In marketing any new commodity it is necessary that it be persistently pushed by those interested. One of the largest handlers of this stock at present is the Faust Brothers Lumber Company of Paducah, Ky., and Chicago, Ill.



The Mail Bag



B 329—Wants Market for Black Locust

Somerville, N. J., Oct. 31.—Editor HARDWOOD RECORD: Can you advise what commercial use is made of black locust lumber other than for insulator pins?

The writer has been advised that about the only commercial use for black locust is involved in its consumption for insulator pins and for policemen's clubs. The larger quantity of black locust is converted into fence posts, for which there is a ready sale, as this wood is regarded as the best growing in the United States for that purpose. The writer has been referred to a possible buyer of fence posts.—EDITOR.

B 330—Seeks Sap Poplar Strips and Quartered Sycamore

East Cambridge, Mass., Oct. 31.—Editor HARDWOOD RECORD: We are in the market for some 1-inch by 2½-inch to 3-inch poplar strips, sap no defect; also ¾-inch, 1-inch, 1¼-inch, 1½-inch and 2-inch quartered sycamore. If you can refer us to anyone you think would have this stock, we would appreciate it greatly.

The writer of the above letter has been referred to four possible sources of supply for the stock named.—EDITOR.

B 331—Cyanamide

Chicago, Ill., Nov. 1.—Editor HARDWOOD RECORD: What is cyanamide? Can you also advise us whether the production of this chemical will have any deleterious effects on adjacent timber?

The writer of the above letter has been advised that cyanamide is a product formed by the fixation of atmospheric nitrogen. It is an important ingredient in the manufacture of commercial fertilizers, and its usual form is crystalline, and known as calcium cyanamide. Much chemistry is involved, but the principal apparatus is an electric furnace through which a current of air is passed in contact with lime and carbon. The chief cost in its manufacture is the power for generating the electricity for heating the furnace. I am told there is a plant at Niagara Falls, and others in

Europe, particularly in Italy, which are producing this chemical.

I know of no reason why such a plant would be injurious to plant or animal life in the vicinity.—EDITOR.

B 332—Wants Market for Dogwood and Persimmon Offal

Memphis, Tenn., Oct. 29.—Editor HARDWOOD RECORD: We would like to find a market for the offal of dogwood and persimmon from which we make shuttle blocks, and believe that spools from this wood would be satisfactory. Can you give us any information for the disposition of this material?

The writer of the above letter has been advised that HARDWOOD RECORD is unable to suggest a market for dogwood and persimmon offal.—EDITOR.

B 333—Seeks Various Items of Lumber

Camden, N. J., Nov. 2.—Editor HARDWOOD RECORD: Can you assist us in securing a source of supply for a carload of 6/4 No. 1 and No. 2 red birch? Also want 4,000 feet each of 5/4 and 6/4 No. 1 and No. 2, and No. 1 common chestnut, 16,000 feet altogether. We also want straight or mixed cars of 10/4, 12/4 and 16/4 firsts and seconds quartered white oak, and very likely can use a percentage of No. 1 common. Also one straight carload of 10/4 tough plain firsts and seconds white oak, and a carload of 6/4 tough white ash, not dry, for bending purposes. Philadelphia delivery sought on all the above.

The above inquiry is from a leading eastern wholesale house, and it has been referred to several possible sources of supply.—EDITOR.

B 334—Wood Alcohol Plant

Springfield, Mass., Oct. 28.—Editor HARDWOOD RECORD: Would be glad to have you kindly advise us of any parties who you think might be interested in locating a wood alcohol plant. We have a good proposition to present to anyone experienced in the manufacture of this material.

B 335—Disputes Record's Analysis

Chicago, Ill., Oct. 26.—Editor HARDWOOD RECORD: I was not a little surprised in your recent issue to note an article entitled "The Metal Bedstead Craze." Not so much the article for that matter, for I realize the insane attempt to manufacture cheap on the part of some of the

manufacturers, has given cause to extend the above reflection to the industry, but some manufacturers are endeavoring and do put out mighty fine pieces of art.

I refer particularly to the insane statement that the metal bed sale had dropped off fifty per cent. You are pushing hardwood, of course, slamming metal cars as well, but before letting such a statement slip through, I would suggest that you stop and get facts. You must know that more metal beds are sold today than ever, giving your fifty per cent less statement an odor that doesn't smell very good, and is strongly in contrast with your otherwise valuable and trite articles.

The writer of the above letter is advised that the article on metal bedsteads, to which he refers, appeared in HARDWOOD RECORD, March 10, 1912, and that he evidently is not a very close student of the paper or he would have discovered it long before this. His letter was probably inspired from some other source than a personal reading.

The information that reached me on this subject I considered authoritative and so published it. The writer is advised that if he can present any substantiated facts other than the bare statement that there are more metal beds sold today than ever before, I shall be very glad to give him space in HARDWOOD RECORD for the publication of his statement. In the face of the evidence I have to the contrary, I can not accept the writer's statement as authoritative.—EDITOR.

B 336—Hickory and Ash Sucker Rods

Cairo, Ill., Oct. 28.—Editor HARDWOOD RECORD: We are looking for a market for hickory and ash pump sucker rods. We shall be very glad if you could put us in touch with parties interested in this class of material. We will be able to furnish a large quantity of this kind of stock within the next six months.

B 337—Seeks Names of Railroad Purchasing Agents

Millett, W. Va., Oct. 28.—Editor HARDWOOD RECORD: I would like to get a book showing the names of the purchasing agents of all the railroad and electric lines. I sell most of my ties direct to these lines, but sometimes find it difficult to secure the names of the purchasing agents.

The writer of the above letter has been advised that he can secure the names and addresses, corrected up-to-date, of the purchasing agents of all the steam and electric railroad lines in the country by buying a

copy of the Official Railroad Guide, wherein he will find listed the officers of all the railroads, together with the names of all purchasing agents.—EDITOR.

B 338—Wants Tie Plugs

New Orleans, La., Oct. 25. Editor HARDWOOD RECORD: We will appreciate it if you will put us in touch with someone from whom we can buy hardwood squares, wedge point, to be used as tie plugs, the size to be 5 $\frac{1}{2}$ inch by 5 $\frac{1}{2}$ inch by 4 $\frac{1}{2}$ inches long.

B 339—Wants Gum Box Boards

Omaha, Neb., Oct. 24.—Editor HARDWOOD RECORD: We have a place where we could use about 350,000 to 400,000 feet of thoroughly dry surfaced gum box boards. Want price f. o. b. South Omaha, Neb., less usual commission.

B 340—Seeks Paper Birch Lumber or Squares

Syracuse, N. Y., Oct. 23.—Editor HARDWOOD RECORD: Kindly give us the names of lumber manufacturers who either manufacture lumber or squares of bolts of silver white birch. This birch is used by bobbin and spool manufacturers. If you can give us this information it will be gladly received.

The writer of the above letter has been advised that the birch he refers to is paper birch, most of which is cut in the state of Maine. There are some little shipments of logs and dimension of the same material from nearly all the northern New England States, and from northern New York. He has been supplied with a list of birch manufacturers, from some of whom he would be able to obtain the paper birch in question.—EDITOR.

B 341—Wants Quotation on Maple and Oak

Detroit, Mich., Oct. 14.—Editor HARDWOOD RECORD: I would like to have a price on 300,000 feet of 4/4, 6/4 and 8/4 No. 2 common and

better West Virginia or southern soft and hard maple. Also on 250,000 feet of 4/4 and 6 4 No. 1 common and better sound wormy oak, F. O. B. Detroit.

B 342—Wants Hickory Dimension

Chatham, Ont., Oct. 12.—Editor HARDWOOD RECORD: Can you tell us where we can find dimension stock in hickory suitable for spring-bars, head-blocks, etc.? The pieces are not large and it should be a very desirable bill to fill.

B 343—Seeks Source of Supply for Veneers

Frazee, Minn., Oct. 13.—Editor HARDWOOD RECORD: I wish to learn where I can purchase the different kinds of veneer of hard and some soft woods. I will want to use it in different thicknesses. The use will be for the building up of different articles. I will expect it to be built up in such a manner as to prevent warping and cracking. The thickness will vary from 3/16 to 1/2 inch.

I will be grateful for any other information along this line that you will give me.

The writer was advised where he can secure the veneers he seeks.—EDITOR.

B 344—Seeks Oak Table Tops

Indianapolis, Ind., Oct. 11.—Editor HARDWOOD RECORD: We are open for a large quantity of oak table tops. If you can put us in communication with anyone who is able to furnish these, we will greatly appreciate it.

The above inquirer has been given a few sources of supply for the material sought.—EDITOR.

B 345—Wants Market for Persimmon

Memphis, Tenn., Oct. 1.—Editor HARDWOOD RECORD: We are accumulating in sawing persimmon blocks a considerable quantity of black heart. This takes a nice finish and would be especially adapted for small ornamental purposes. Would like a market for it.



News Miscellany



Meeting of Memphis Lumbermen's Club

The special committee, appointed to investigate the proposed merger of the Lumbermen's Club of Memphis with the Business Men's Club, submitted its report at the semi-monthly meeting held at the Hotel Gayoso, Oct. 26. It said that it had discussed with the Business Men's Club an affiliation agreement by which the Lumbermen's Club might secure all the benefits accruing under the merger plan without the necessity of losing the identity of the former. There was considerable objection to the merger when the subject first came up because of the unwillingness of the members of the Lumbermen's Club to see the identity of that organization lost. It will be necessary for the Business Men's Club to make certain changes in its constitution and by-laws before the affiliation agreement can be ratified, but the present outlook is for the adoption of this agreement. The Lumbermen's Club of Memphis is to secure permanent headquarters and is likewise to have its clerical work done without cost and its stationery furnished free. It is also to have the backing of the Business Men's Club in the handling of all of its principal problems. The report of the committee was made in the form of resolutions.

A campaign for lower insurance rates on lumber was launched at this meeting. James E. Stark said that it was his positive conviction that the lumbermen were paying out of all proportion to the risk involved and he urged that

the club take steps to secure the table of experience showing the ratio as between premiums paid by the insured and losses paid by the companies. He was under the impression that the former were many times as large as the latter. On motion the secretary was instructed to write to the Western Union of Chicago for the desired information along this line and he was likewise authorized to write to the commissioner of insurance of Tennessee. It developed in the discussion that requests had been made before for this table of experience but that it had not been forthcoming. The information was volunteered by several members that discussion with insurance men had led them to believe that, if the club took an active and positive stand in this matter, it would be possible to secure a reduction of twenty-five to thirty-three per cent in insurance rates. Emphasis was laid upon the fact that rates below the Ohio river were very much higher than those above that stream. Due stress will be laid upon the very decided improvement in fire fighting facilities here and upon the reduced rates to which this condition entitles the insured. The subject will be handled through the secretary and through the law and insurance committee of the club.

The following resolutions were adopted in connection with the recent death of E. E. Goodlander, a charter member of the Lumbermen's Club of Memphis and also at one time president of that organization.

WHEREAS, God in His infinite wisdom, has seen fit to call from the scene of his earthly labors Elmer E. Goodlander, president of the Goodlander-Robertson Lumber Company, and

WHEREAS, the Lumbermen's Club of Memphis has lost one of its oldest and most valued members and each of us a true friend and lovable companion, and

WHEREAS, his business associates have been deprived of his wise counsel, and his wife and children of the ministrations of a loving husband and devoted father, therefore be it

RESOLVED, That we, the Lumbermen's Club of Memphis hereby express our deep sorrow over his death, and be it further

RESOLVED, that these resolutions be spread upon the minutes of this club and that copies be sent also to his business associates and to the members of his bereaved family to whom our most sincere sympathy is thus tendered.

F. B. Robertson was in New Orleans Saturday and C. B. Dudley, first vice-president, presided. The attendance was reasonably large. The meeting was a very satisfactory one and the usual luncheon was enjoyed.

New Lumbermen's Club

At a luncheon at the Hotel Baltimore, Kansas City, during the last week of October, the Kansas City Lumbermen's Club was formally organized and launched. Provision was made for a monthly dinner, and dues fixed to cover all necessary expenses. The initial purpose of the organization is to promote sociability and a friendly spirit among local lumbermen, but it is anticipated that after its membership increases, matters requiring concerted action will add to its scope of usefulness.

Membership is confined to members of firms, officers and stockholders of corporations, and department heads engaged in lumber pursuits.

The second meeting of the club was held Oct. 30 to complete the organization and elect officers.

Cincinnati Lumbermen's Club Meeting

The regular monthly meeting of the Lumbermen's Club was held at the Business Men's Club, Tuesday evening, Nov. 5. The regular meeting night of the club is the first Monday of each month but owing to the fact that the next day was election day, the executive board changed the night this month so that members could receive the returns from the election during the meeting. A table d'hôte dinner served at 6:30 p. m. was enjoyed by about sixty members. Many returns were read between the courses and much good-natured fun made of several disappointed members whom the result of the election did not particularly please. There was not very much business attempted as a very important rate question was to have been brought up for general discussion as to just what action the club cared to take, but the committee investigating the matter not being quite ready to make a full report and the general spirit of election time prevailing so strong, President Shiels preferred to wait until the December meeting to place the matter before the members for action. It is quite certain that a strong effort will be made soon by the club to settle some of the rate questions now before the lumbermen.

Timberland Purchase of New Jersey

The governor of New Jersey has approved of an act to purchase 100,000 acres of timberland, including water rights, in south Jersey, based on the enabling act passed by the legislature of that state last winter authorizing it. The price of the property is \$1,000,000, and the area will constitute the future water supply of all New Jersey, south of the Raritan river. The area is capable of developing 4,000,000 gallons of water daily.

This is a movement in which Harry R. Humphreys, president of the Hadentine Lumber Company, Inc., Camden, N. J., and who is a member of the board having the matter in charge, has been enthusiastically urging on the legislature of New Jersey for several years. Mr. Humphreys is to be congratulated that he has contributed to this most desirable piece of law-making.

The Truth of the Matter

In Oklahoma not long ago a man went into a store to buy a saw. He saw the kind he wanted, and asked the price. It was \$1.65, the dealer said.

"Good gracious!" said the man. "I can get the same thing from — & Co. for \$1.35."

"That's less than it cost me," said the dealer, "but I'll sell it on the same terms as the mail-order house just the same."

"All right," said the customer. "You can send it along and charge it to my account."

"Not on your life!" the dealer replied. "No charge accounts. You can't do business with the mail-order house that way. Fork over the cash."

The customer complied.

"Now 2 cents for postage and 5 cents for a money order."

"What?"

"Certainly. You have to send a letter and a money order to a mail-order house, you know."

The customer, inwardly raving, kept to his agreement and paid the 7 cents.

"Now 25 cents expressage."

"Well, I'll be!"—he said, but paid it, saying, "Now hand me that saw and I'll take it home myself to be rid of this foolery."

"Hand it to you? Where do you think you are? You are in Oklahoma, and I'm in Chicago, and you'll have to wait two weeks for that saw."

Whereupon the dealer hung the saw on a peg and put the money in his cash drawer.

"That makes \$1.67," he said. "It has cost you 2 cents more and taken you two weeks longer to get it than if you had paid my price in the first place."

A Growing Business

Another illustration of the good results of modern business methods is seen in the accompanying illustration showing the increased plant of the R. S. Bacon Veneer Company of Chicago. This concern was incorporated in 1900, starting on a small basis, and since that time has grown steadily, greatly increasing the scope and volume of its business year by year. A short while ago this company erected a veneer mill in connection with its Chicago plant and has just now completed a large addition to its warehouse at the same place. The new mill enables the company to turn out a great deal of its own stock on its own machines, while the new warehouse, which increases the floor space by a third, will provide a great deal more room for the storage of the complete line of fancy wood veneer carried by the Bacon company.

Mr. Bacon is considered a shrewd and competent buyer of logs and has made numbers of trips across the ocean in search of good timber for his mills. The company now has en route

a large quantity of fine Circassian logs, it being the intention to stock up pretty heavily in this line in anticipation that the hostilities among the European nations may eventually close up the Dardanelles. As Circassian walnut logs come by way of the Dardanelles, such an event would prove disastrous to handlers of this stock. A large assortment of high-grade mahogany logs is also on the way and, judging from appearances and from what Mr. Bacon states, his company is doing a very active business.

The R. S. Bacon Veneer Company has an annual output of 10,000,000 feet of sliced veneer, including mahogany and Circassian walnut mainly, other woods being rosewood and similar fancy woods and native oak.

New Manager National Lumber Manufacturers' Association

The resignations are announced of Manager Leonard Bronson and Secretary George K. Smith of the National Lumber Manufacturers' Association, and the appointment in their places of John E. Rhodes, recently of Tacoma, Wash., as manager-secretary to take office on Jan. 1 next. While both the incumbents resigning from this organization have performed good service for the association, the appointment of Mr. Rhodes seems to receive the universal approbation of members of the allied associations, which go to make up the parent organization.

Hitherto the manager's office has been located at Chicago, and the secretary's at St. Louis, and the interests of both offices have at times seemed to be in conflict. The office of the new manager-secretary will be located at Chicago.

The National Lumber Manufacturers' Association is made up of the following subsidiary organizations, including the stronger element of the producers of the chief wood manufactured in this country: Northern Pine Manufacturers' Association, Northern Hemlock and Hardwood Manufacturers' Association, Michigan Hardwood Manufacturers' Association, Hardwood Manufacturers' Association of the United States, North Carolina Pine Association, Georgia-Florida Saw Mill Association, Yellow Pine Manufacturers' Association, Southern Cypress Manufacturers' Association, Western Pine Manufacturers' Association, West Coast Sugar and White Pine Manufacturers' Association, and the Pacific Coast Lumber Manufacturers' Association. The president of the association is E. C. Griggs of Tacoma.

Mr. Rhodes brings to his office a ripe and competent experience in both lumber and association affairs, and incidentally has the reputation of being a pretty good newspaper man. He is a graduate of the University of Minnesota; was engaged in railroad work from clerkship to assistant general superintendent for some years; has been purchasing agent for railroads and log-

ging companies; as a newspaper man has occupied sundry positions from reporter to manager, and was allied with the Mississippi Valley Lumbermen's Association. Mr. Rhodes acted as secretary for Frederick Weyerhaeuser for several years, and more recently has been manager of the Tacoma Tribune.

Mr. Rhodes will certainly put some forceful and intelligent work behind the National Lumber Manufacturers' Association, and his success in his new vocation is assured from the start. At the present time he is touring the lumber manufacturing districts of the West, and will reach Chicago about Christmas to take up his work.

Elm in England

The London Timber News says that probably never before were elm timber and elm planks at such a discount as is the case at the present time, and coffin boards of this timber are not only plentiful, but remarkably cheap, this due wholly to the large quantities that are being sent in from abroad at ruinously low prices. Even the coffins are being sent in ready for use, and if not so, will be made and delivered during the same day, and at prices which defy the London maker with the most approved and up-to-date manufacturing machinery. This is the usual case, however, although all timbers of foreign extraction have not taken so well as elm when placed on the London market.

Terms of Sale Adopted

The National Wholesale Lumber Dealers' Association has definitely adopted logical terms of sale, which hereafter will be attached to the sales tickets of members of that organization. The form is herewith appended:

The terms hereon are those agreed on by both buyer and seller and are a part of the sale agreement.

Settlement to be made promptly on receipt of each car. Freight, net cash. Balance by note at 60 days from date of invoice or less 1½ per cent discount for cash if paid within 15 days from date of invoice; or 1 per cent for cash if paid within 30 days from date of invoice.

No discount allowed after 30 days. If car is not received within the above discount times, and discount is desired, prepayment on account will not be held as acceptance of the shipment and the right to make corrections and complaint will not be forfeited thereby. In making delivered prices, cost of goods delivered at destination is guaranteed, but not against delay in transit.

Claims for count or quality must be reported as soon as car is unloaded and tally proven. No claims allowed if not reported within 10 days after unloading.

All contracts and agreements are made contingent upon strikes, fires, floods, inability to secure cars, delays of carriers and other delays unavoidable and beyond our control.

In making delivered prices we simply guarantee the cost of goods at your place, but are in noway responsible for their safe delivery.

F. S. Underhill at Philadelphia is chairman of the committee which drafted these terms of



PLANT OF THE R. S. BACON VENEER COMPANY, CHICAGO.

sale, and like all the association work handled by this gentleman, it is manifestly fair to both buyer and seller. In his report commending the adoption of this form, the chairman says he believes the time has come when a firm stand should be taken with those who habitually disregard terms of sale, and by united action endeavor to bring about a better order of things by insisting upon settlement in accordance with the terms under which lumber is sold.

The National Wholesale Lumber Dealers' Association, through its office at 66 Broadway, New York, is prepared to execute order forms embracing the new terms of sale for its members.

Forestry in Missouri

The University of Missouri at Columbia, midway between St. Louis and Kansas City, has added a school of forestry to its course, and is prepared to take up the work in a scientific way.

Over half the state of Missouri, an area of 25,000,000 acres, is still covered with natural forest growth. However, only a small portion of this forested land is commercial timber. The greater part consists of cutover land or brush land and land from which the better kinds of

The school of forestry proposes to take up the work of growing wood in Missouri for Missourians. It is proposed to check the outgo of \$7,000,000 a year to other regions for lumber which the state can produce. A long period of time will be required to reach the desired result, but that result will be held steadily in view, and foresters will be trained to lead the movement. The state owns 50,000 acres of forest land which will be used as part of the college equipment, and the students will be amply provided with practical experience by the time they graduate.

New Hardwood House

The Reynolds Brothers Lumber Company, it is announced, has been organized at Franklin, N. C., by G. E. and J. W. Reynolds, well-known Tennessee lumbermen, who were formerly allied with George C. Brown & Co., at Proctor, Ark.

The Reynolds Brothers Lumber Company has purchased the mills and equipment of George C. Brown & Co. at Franklin, N. C., together with considerable lumber on their yards. The equipment is being overhauled, and a new mill installed to cut not only oak, ash and poplar lumber, but oak and hickory dimension stock as well. The mill will be stocked by logs purchased in the surrounding territory along the Talulah Falls railroad. The company has already purchased enough timber to insure a two years' run. The stock produced at the principal plant will be supplemented with the product from portable mills in the region, lumber from which will be brought to Franklin and yarded.

The Messrs. Reynolds, from their thorough acquaintance with all details of lumber manufacture and distribution, should meet with unqualified success in their new venture.

Change in Personnel S. A. Woods Machine Company

Announcement is made of a change in the personnel of the officers of that foremost woodworking machinery house, S. A. Woods Machine Company of Boston, Mass. This is brought about by the retirement of Frank F. Woods, whose health for the last year has been so precarious that he finds it necessary to permanently retire from business, which will be a matter of sincere regret to the patrons of his company.

The new president of the S. A. Woods Machine Company is H. C. Dodge, who will act as secretary also. The vice-president is C. W. H. Blood, who also occupies the position of treasurer. To introduce these two gentlemen to HARDWOOD RECORD readers seems scarcely necessary, as both have been allied with the Woods company for many years.

Mr. Dodge has been connected with the company for about ten years. He was born at Woburn, Mass., is a Harvard man, and since entering the business has devoted practically all his time in the study of lumber and woodworking affairs. His original connection with the Woods company was in charge of the business in the southeast and southern part of the United States. Eventually he had charge of the company's New Orleans office, and his territory extended from Texas to the Atlantic coast and as far north as the Ohio river. During the last two years he has been general sales manager of the company, and for the last year has filled the position of secretary also.

Mr. Dodge has grown rapidly both in his knowledge of machinery and lumber affairs, and has a wide acquaintance in the lumber trade. To him is given a great portion of credit in the revolution of dressing lumber, which is now enjoyed by the planing machine users of the world, as it was largely through his initiative and energy that the S. A. Woods Machine Company undertook to enlarge the usefulness and the possibilities of the planing machine.

C. W. H. Blood has been connected with the Woods corporation about twenty-one years, dur-

ing all of which time he has filled the position of head designer and engineer. His original mechanical training was obtained at Cornell, from which college he graduated in 1892. Mr. Blood is a native of Kalamazoo, Mich., and his early business years were spent in lumber operations in that state. He is an active member of the American Society of Mechanical Engineers and is associated with other prominent engineering and mechanical organizations. His record as an inventor in connection with planing mill machinery is scarcely equalled by any other mechanical engineer in the country. The United States patent office has issued to him, personally, since he has been actively engaged in his profession, forty patents covering various tools, woodworking and planing mill machinery appliances and improvements on such machines. During his connection with the company he has personally supervised the designing and construction of every machine that it has put upon the market.

The two gentlemen named have purchased the interest of Frank F. Woods, and it goes without saying that there will be no change in the high-type of the Woods' planing machinery, or in the systematic, careful and painstaking way



H. C. DODGE, PRESIDENT AND SECRETARY,
S. A. WOODS MACHINE COMPANY,
BOSTON, MASS.

trees have been heavily culled. Owing to repeated forest fires which destroy reproduction and to the fact that no provision was made in cutting the timber for re-stocking the land by leaving seed trees of valuable species, much of this land is in an unproductive condition or has grown up to useless kinds of trees.

It is estimated that the commercial forests that still remain contain not more than 25,000,000 board feet of timber. Since the annual cut from these forests in lumber, ties, etc., amounts to over 1,000,000,000 board feet each year, it will not be many years before Missouri becomes dependent on other states for her supplies of saw timber. Even at the present time a large percentage of the lumber used is imported from other regions. In 1911 the wood-using industries of the state bought 443,272,993 feet of lumber for further manufacture into various commodities. Less than thirty-six percent of this grew in Missouri. The total amount paid for the lumber was \$10,689,962, and more than \$7,000,000 of it went outside of the state. A small part was paid for woods which do not grow in the United States, but most was spent for species which might be produced in Missouri, and which once grew there in commercial quantities.



C. W. H. BLOOD, VICE-PRESIDENT AND
TREASURER, S. A. WOODS MACHINE
COMPANY, BOSTON, MASS.

in which the business of the company will be conducted in the future.

The S. A. Woods Machine Company's product has always stood for the best that inventive talent, money and close application to details could produce, and there is no woodworking machinery house in the country that has delivered a product that has any nearer approximated steel and iron working tools than has this company.

HARDWOOD RECORD wishes to congratulate Messrs. Dodge and Blood on securing control of this great institution, which is only a just recognition of their long service and high talent in connection with the house and the woodworking machinery industry as a whole.

October Issue Blue Book

The National Lumber Manufacturers' Credit Corporation of St. Louis, Mo., has recently delivered to its subscribers the October issue of the "Blue Book," which is the eighteenth volume published by this company. The publishers advise they have taken the utmost care in preparing the book to make it as complete and accurate as possible, and the capital and credit ratings contained therein are based on information obtained from sources deemed reliable.

In the book will also be found double page, colored maps, which are placed before each state for ready reference, and an index of railroads appears at the beginning of each state, and shows the roads operated in each respective state.

Building Operations for October

Building statistics from some fifty cities throughout the country compiled by the American Contractor, Chicago, show a gain for October of 8½ per cent, as compared with October, 1911. Reports for the past ten months show a gain of 4½ per cent in the same cities, as compared with the same months of the past year. Taking political disturbances into consideration, the showing is more than satisfactory. For the month of October over fifty per cent gain is shown in the following named cities: Akron, 67 per cent; Atlanta, 530; Baltimore, 89; Buffalo, 76; Des Moines, 117; Detroit, 67; Evansville, 83; Ft. Wayne, 61; Manchester, 436; Memphis, 97; Minneapolis, 55; Norfolk, 247; Paterson, 56; Philadelphia, 55; Shreveport, 77; Wilkes-Barre, 64. Twelve cities scored a gain of over 25 per cent for the past ten months, as compared with the same period of the past year. Particulars will be found in the following table:

City.	October, 1912, Cost.	October, 1911, Cost.	Per Cent. Gain Loss
Akron	\$ 49,845	\$ 293,436	67
Atlanta	2,115,267	335,403	530
Baltimore	1,019,554	539,028	89
Buffalo	1,616,660	916,000	76
Chicago	8,745,600	8,785,700	..
Cincinnati	798,625	2,624,970	69
Columbus	341,983	421,578	18
Denver	450,510	432,300	4
Des Moines	255,809	112,860	117
Detroit	2,544,005	1,522,649	67
Duluth	178,785	237,555	24
Evansville	229,925	125,041	83
Fort Wayne	193,415	119,750	61
Grand Rapids	218,092	403,933	46
Harrisburg	51,175	112,650	54
Hartford	698,505	471,705	29
Kansas City	893,335	726,348	22
Los Angeles	2,677,780	1,821,727	46
Manchester	538,789	100,485	436
Memphis	750,891	379,786	97
Milwaukee	1,196,366	1,073,732	11
Minneapolis	1,117,350	718,815	55
Nashville	65,518	73,632	11
Newark	773,748	724,766	6
New Haven	399,465	289,980	37
New Orleans	187,632	142,357	31
Norfolk	348,513	100,213	247
Manhattan	3,221,485	6,338,333	49
Brooklyn	3,379,847	2,741,530	23
Bronx	2,460,189	1,508,175	63
New York	9,061,521	10,588,038	14
Oakland	836,169	621,907	34
Omaha	225,365	363,480	37
Paterson	159,487	102,219	56
Philadelphia	3,644,225	2,346,130	55
Pittsburgh	797,999	2,136,670	62
Portland	1,068,780	1,690,980	37
Rochester	915,121	1,104,775	17
St. Paul	834,991	571,482	46
Salt Lake City	209,476	173,700	20
San Francisco	1,722,860	1,255,892	37
Scranton	126,216	171,409	26
Shreveport	149,954	84,434	77
Spokane	146,730	185,025	20
Wilkes-Barre	281,104	171,232	64
Worcester	741,509	547,532	35
Total	\$49,729,019	\$45,721,324	8½

Mahogany in Canada

The use of mahogany in Canada is on the increase, and now amounts to about three million feet a year. The imports of this wood into Canada have risen slowly but steadily for many years. It is employed principally for furniture of the best class and for bank and office fixtures.

The wood comes from Central America, West Indies and from western Africa. It costs more than any wood growing in the United States and is employed only in high-grade work. An increasing quantity of mahogany is used yearly in Canada by the manufacturers of sleeping cars.

Change of Headquarters

The George Webster Lumber Company, with sawmills at Malone, N. Y., and at various points in Vermont, has moved its general and sales office from Swanton, Vt., to 21 Besse place, Springfield, Mass., and in addition to handling the output of its northern mills, will take on the merchandising of white and red oak, chestnut, poplar and gum. The company also has a New York branch sales office at 25 West Forty-second street, which handles the New York City and New York state trade, while the Springfield office handles the New England business.

A Public Spirited Citizen

At the last session of the legislature of Michigan a bill was passed creating a commission to secure a site for a permanent encampment for the National Guard of that state. R. Hanson of the Salling-Hanson Company, Grayling,



R. HANSON, GRAYLING, MICH.

Mich., an unusually public spirited citizen of that state, as well as one of its foremost lumber operators, has offered to donate to the state for the purpose of a great public park and game preserve, and for the location for a permanent encampment for the National Guard, 75,000 acres of land contiguous to the town of Grayling, and three miles north of the present forest preserve of the state, which contains 36,000 acres.

The land offered by Mr. Hanson is varied in topography and includes a beautiful lake, hills and valleys partially wooded and partially open country, abounding in game. The state military board has just inspected the tract and, while Mr. Hanson's offer has not yet been formally accepted by the state, it undoubtedly will be as no conditions are imposed in the tender.

Booklet on Birch

The Northern Hemlock and Hardwood Manufacturers' Association, of Wausau, Wis., has issued a booklet in which the many fine qualities of yellow birch as a finishing wood are shown. The two species of birch employed in this country for flooring, furniture and finish are yellow birch (*Betula lutea*), and sweet birch (*Betula lenta*). The former reaches its best size and character in the lake states, and is justly classed as one of the most artistic, reliable, and versa-

tile of the hardwoods of this country. The admirable wood has lost nothing by the manner in which the booklet presents it to the public in a series of pictures and drawings showing how it may be used to best advantage. A sample of the wood, showing both light and dark finish, accompanies the booklet, which was prepared by R. S. Kellogg, secretary of the association. The booklet is being mailed to architects and builders throughout the country, and should prove a good advertising medium for the exploitation of birch.

Forest Planting by New York School

The New York State College of Forestry at Syracuse University has undertaken this year to furnish illustrated lectures on practical forestry in all the high schools of the state, and the State Conservation Commission has arranged to provide a thousand or more seedling trees to each high school that will plant them in a woodlot. It is proposed that the schools shall secure a vacant hillside or other piece of waste land and plant and maintain a bit of forest land. A million and a half seedling trees are now coming on in the state nurseries.

New River Route

Admission of railroads that they are crowded with business and that the car shortage now existing may continue to increase as the years advance, has caused the formation of a new \$3,000,000 corporation in Pittsburgh which has for its object the operation of large freight and passenger boats between Pittsburgh and New Orleans. In order to take care of the immense freight traffic that will result from the operation of through Pittsburgh-New Orleans boats the new company, which has just applied for a charter, has had plans drawn for two 300-foot steel bottom boats, which it will place in the southern trade as soon as completed.

There has been more or less trouble in past years in Pittsburgh-New Orleans waterways transportation because of the fact that several transfers of freight had to be made—at Cincinnati and Memphis. All transferring of freight from one line to another will be done away with hereafter.

The first Pittsburgh-New Orleans boat will leave the Pittsburgh harbor early in December. Hundreds of tons of freight are assured the first boat.

From the South, where vast lumber interests are located, inquiries concerning reservations for space for large lumber shipments into the Pittsburgh market are being received.

This new river transportation company will place at the disposal of lumber shippers, and all other large interests, barges and lighters, which may be loaded at local shipping points, and then they will be picked up on trips, either south going or north bound. By this method the lumber shipper is guaranteed a speedy means of transportation, at a greatly reduced freight rate, and on a basis of time that will beat the rail shipment to the same destination.

A battery of boats has been secured for the starting of this service, and the fleet will be greatly increased within the coming six months. In addition to the boats of high power, one hundred barges and lighters are to be placed in service. These, in turn, are to be at the disposal of lumber shippers who have large accounts and selling agencies in the upper part of the Ohio, Allegheny and Monongahela valleys. These barges and lighters will be towed upon their arrival at Pittsburgh to the various yards without any additional cost to the buyer or shipper.

With the improvement of the Ohio and Mississippi rivers assured, the transportation of lumber and other freight by water is bound to grow by leaps and bounds.

English View of American Lumber Trade

The London Timber Trade Journal of October 19, in reviewing the crop situation in the United

States, drew the following conclusions of its effect upon the lumber business:

"With the above facts before us we have at once evidence as to the hum of prosperity in the States, which is clearly reflected in the lumber trade reports before us, which show that the consumption more than balances production, and the anxiety to secure stock in fairly dry condition is extremely keen in every section of the trade, especially in hardwood. In many cases advances of two dollars per thousand are easily obtainable, and this state of things is extremely likely to become accentuated, especially consider-

Louis, seems to be taking hold of the work of the order in a forceful way, and if members will thoroughly co-operate with him, Hoo-Hoo should be made an institution with which every lumberman might be proud to be allied.

American Hardwood Exporters' Difficulties

American lumber exporters are having all sorts of trouble this season, says the London Timber Trade Journal. They are confronted with the probable withdrawal of through bills of lading on export shipments on the part of the eastern roads. The western roads have announced their

tice has been for carloads sent to New Orleans and other ports for shipment to remain loaded until put on board, but in consequence of a shortage of cars in America demurrage is now charged on them at the rate of a dollar per day.

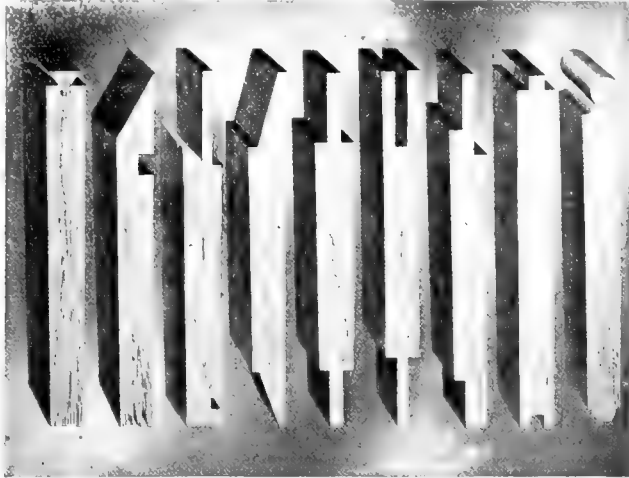
On top of all of the foregoing troubles the lumbermen are threatened with an advance of from two to six cents per hundred pounds on north-bound shipments of lumber, as well as an advance of about two cents per hundred pounds on shipments to ship side to New Orleans and other ports. This is a result of an effort on the part of the railroad companies to bring about uniformity of rates as between hardwood and yellow pine shipments. It is certain that this proposed advance will be vigorously contested.

New Double-End Tenoner

The double-end tenoning machine was first conceived and patented by the H. B. Smith Machine Company of Smithville, N. J., in 1866. Since then the development of this machine has been rapid and in accordance with the demands of the manufacturing trade. The company now makes forty different styles and sizes of this machine, one of which is illustrated in connection with this story.

The extra heavy machine will work as short as four and five-eighths inches and as long as one hundred and twenty inches between shoulders. It will feed stock as wide as forty-eight inches. The feature of the machine is the patent scoring attachment designed for working veneer stock without marring the shoulders of the tenons.

The machine is fitted with a parallelogram frame so designed as to minimize vibration between the cutter-heads and thus insure the highest possible grade of work. For feeding, the tenon is equipped with two endless chains composed of laminated steel, which chain is drawn, not pushed through its motion. Thus no dirt nor dust can enter the bearing or joints to disturb accuracy. The rates of speed of this machine vary from six to twenty feet a minute, the feed being operated by a lever that is within easy reach of the operator. An adjustable gauge at the left or fixed end serves to start the work in the proper direction. The



VARIOUS TENONS PRODUCED BY THE SMITH TENONER

ing the higher values which mahogany is commanding at every point. All evidence tends to show these will be fully maintained, and it is probable they will go still higher.

"Hence, whilst mahogany as an imported wood is extremely fashionable, the inevitable tendency must be in the States to more and more revert to domestic woods for furniture. Of course, the mere statement of such facts may in the abstract be regarded as a matter more affecting the Americans than ourselves, but it must be obvious that international commerce is so intertwined that any advance in prices must in the long run be reflected in our markets, especially when this is considered in connection with the already admitted car shortage in the States, along with the abnormal freights now current.

"It must be admitted that the position is most exceptional, and those who are fortunate to have landed or afloat substantial stocks need have no anxiety to sell, because it is inevitable that available stocks are bound to be extremely limited for an indefinite period, and in computing selling prices the holders should not merely consider the actual cost, but should rather base them upon the figures it would cost to replace them."

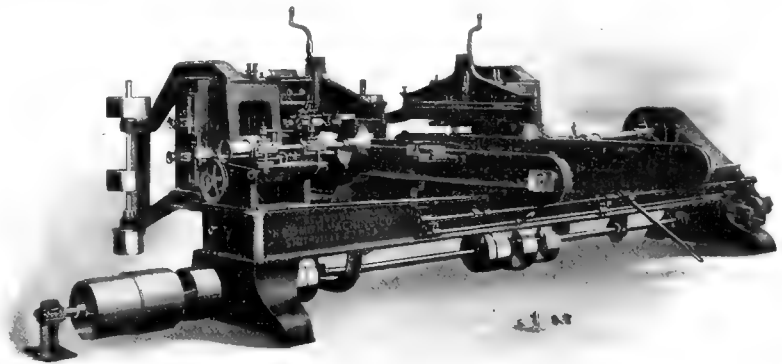
Hoo-Hoo

Frank W. Trower, Snark of the Universe, and other members of the Supreme Nine, have issued an important letter to all Vicegerents, urging upon them earnest, faithful and enthusiastic work for the order. The latter also urges a most rigid enforcement of the laws of Hoo-Hoo, rather than the enactment of new laws. Particular attention is demanded covering the eligibility and character of initiates, and in the conduct of initiations.

The latter also calls attention to the rule against permitting intoxicants to be served at concatenations or on-the-roof sessions. It urges solicitation the interest of all old members of Hoo-Hoo in concatenations, and getting the order again together into enthusiastic and commendable work, which shall tend to build it up into a medium of good fellowship, enthusiasm and advantage to its members.

The new scrivener, W. M. Stephenson of St.

intention of withdrawing such bills of lading by Oct. 15. Through bills of lading are issued on cotton shipments, and the exporters do not see why it would be just for the railroads to withdraw through bills on lumber and allow a continuance of such bills on cotton and other freight. The withdrawal of such bills will make the handling of export shipments of lumber a very serious matter, and will embarrass some firms in the financing of their business because of making it impossible for them to realize on the face of drafts on export shipments until such



DOUBLE-END TENONING MACHINE, MANUFACTURED BY H. B. SMITH MACHINE COMPANY, SMITHVILLE, N. J.

shipments have been placed on board the steamships and a "master's bill" is held therefor.

Another feature of the export situation is to be found in the requirements on the part of the railroads that exporters name the date of the sailing of vessels by which shipment is to be made to Europe or other foreign countries. This is an entirely new requirement, and is one which is giving lumber exporters considerable trouble. A prominent exporter said recently that, owing to his inability to name the date of sailing of the vessel which he intended to use, it had been necessary for him to unload several cars of stock which had been prepared for export. The prac-

movable end is adjustable either by power or by hand, an index or pointer in front always indicating the length between the shoulders the machine is cutting.

Other features are crucible machinery steel spindles and vertically and laterally adjustable cope spindles. The tenon heads have a seven and one-half inch cutting circle with a smooth drawing cut. Double cut-off saws are placed in front. The pressure bars are attached direct to the uprights and not to the head stocks.

All these machines are fully tested before leaving the works.—Advertisement.

Miscellaneous Notes

The Sterling Furniture Company has incorporated at \$50,000 at Greensboro, N. C.

The Merrill Chair & Manufacturing Company has incorporated at Boston, Mass., for \$200,000.

The Hardwood Flooring Company was incorporated at Roanoke, Va., with \$50,000 capital stock.

The Dryola Veneering Company has incorporated at Charlotte, N. C., with a capital of \$125,000.

The Bienvenue Lumber & Manufacturing Company has recently begun operations at Baton Rouge, La.

A new concern for Malden, Mass., is the Malden Woodenware Company, recently incorporated at \$10,000.

It is announced that a receiver has been appointed for the Suffolk Lumber Company at Jacksonville, N. C.

The W. E. Smith Lumber Company of Memphis, Tenn., has decreased its capital from \$100,000 to \$10,000.

The Winston Handle Company of Winston-Salem, N. C., has recently sold out to the Kelly Handle Company.

The B & B Lumber Company has recently incorporated at Scottsville, Ky., with a capital stock of \$6,000.

The Ackels & Perkins Lumber Company has recently incorporated at Charleston, W. Va., with a capital of \$50,000.

A \$100,000 addition will be built to the factory of the Shaw-Walker Company, manufacturer of filing cabinets, at Muskegon, Mich.

Sam Evans, Hillsboro, O., is starting the building of a complete up-to-date veneer manufacturing plant at Washington Court House, O.

J. Donald Roberts has been added to the sales staff of the Hadentine Lumber Company, Inc., of Camden, N. J., and will cover eastern Pennsylvania.

William Rider & Son, Ltd., London, E. C., announce they have recently moved from 164 Aldersgate street to Cathedral House, 8-11 Paternoster Row, E. C.

The Anderson Lumber Company has recently entered the lumber manufacturing trade at Waycross, Ga. It is incorporated with a capital stock of \$100,000.

The Truckers' Manufacturing Company of Wiliston, Fla., has recently incorporated with a capital of \$10,000, and will manufacture fruit and vegetable crates.

The Great Western Veneer Barrel Company has recently incorporated at Chicago with a capital of \$20,000, for the general manufacturing and merchandising business.

The Rhinelander Woodenware Company of Rhinelander, Wis., has been incorporated at \$10,000 to manufacture broom handles. The manufacture of other woodenware articles will probably be added soon.

It is announced that the Robinson Brothers Lumber Company of Robinwood, Miss., has sold its mill located at Monticello to J. J. Baskette of Henderson, Ky. The mill is a single circular mill cutting hardwoods.

It is announced that Turner, Day & Woolworth Company, the chief handle producer of the country, has arranged for the installation of a new handle mill at Beaumont, Tex., which will be conducted under the name of the Gates Handle Company.

The Pioneer Pole & Shaft Company of Piqua, O., recently purchased the plant of the W. H. Dewitt Company at Oakland City, Ind., for a consideration of \$100,000.

The Southern Hardwood Lumber Company of Richmond, Va., has recently been incorporated at \$50,000 to manufacture lumber, with J. K. Gruner, president; E. P. Murphy, vice-president; P. T. Murphy, secretary and treasurer.

The Batavia Land & Lumber Company has recently been incorporated at Ladysmith, Wis., with a capital of \$15,000 by Emma C. Haug, William Emley and Walter C. Wangerin.

The veneer plant of the Jackson Lumber Company, Jackson, Tenn., which was recently damaged by fire, will be rebuilt. The plant was valued at \$30,000 and insured for \$25,000.

Announcement is made that H. M. Campbell, B. C. Cook and J. F. Wetz have organized the Greenfield Wood Turning Company at Greenfield, Ind., to manufacture handles and wood novelties. The company has an authorized capitalization of \$10,000.

The Jefferson Wood Working Company, Louisville, Ky., is erecting a one-story building of concrete for the manufacture of table rims. This will be operated in connection with its table slide business, which has the largest output of slides in the country.

The Dickson Planing Mill Company, Dickson, Tenn., has placed an order with the Grand Rapids Veneer Works, Grand Rapids, Mich., for remodeling two of its eighty-foot kilns. The order was secured by F. H. Kelly, manager of the company's Memphis office.

The plan of Frank Anderson, Mawawan, N. J., was totally destroyed by fire, causing a loss of about \$4,000. Mr. Anderson is erecting a new and larger plant, with new machinery, for the manufacture of beech, birch, maple, oak and chestnut trim, also wagon stock and gum rollers.

President Frederic Wilbert of the Southern Cypress Manufacturers' Association announces the semi-annual meeting of that body, to take place at the Hotel Grunewald, New Orleans, at 10:30 on the morning of November 20. It is announced that a number of important matters will be up for discussion.

Charles F. Felin & Co., Philadelphia, announce that they have moved their purchasing, accounting and credit departments to their new offices at York Road and Boston street, and that their present sales department will be continued at 322-324 Land Title building.

It is announced that the Southern Hardwood & Tie Company has filed articles of incorporation at Paducah, Ky., with a capital stock of \$25,000. The company is organized for the purpose of buying, selling and manufacturing hardwood lumber and ties. The incorporators are A. B. Smith, W. K. Smith and J. E. Bugg.

The Prendergast Company of Marion, O., recently acquired a site from the Big Four Railroad at Cincinnati, O., for a storage and assorting station with a capacity of 18,000,000 of lumber. The company gets six acres and it is estimated will require 2,000 freight cars annually. The terms of the lease have not yet been made known.

The Norwood Manufacturing Company of Utica, N. Y., has recently opened a branch office at Fremont, Ala., where it has acquired the output of a mill with a capacity of 60,000 feet daily. The branch is in charge of R. E. Boyd and will manufacture timbers and dimension, choice high-grade finish and some boards and flooring. The company is prepared to handle rush orders.

Jeffries Brothers of Chicago have recently purchased the entire plant and timber of the Manchester Lumber Company, operating about six miles from Jasper, Ala. They have not bought the railroad nor farm lands, but simply the mill output and timber in connection therewith. The Manchester company has recently increased the output of the mill by installing a new band mill with a capacity of about 75,000 feet daily.

The Michigan Forestry Association will hold its annual meeting at Saginaw on Nov. 21 and 22. President Charles W. Garfield of Grand Rapids, Mich., is arranging the programme, which will involve addresses by Professor Roth of the forest department of the University of Michigan; Professor Baker of the state agricultural college; Comfort Tyler of Coldwater, field agent of the Michigan Agricultural College; and others.

Hardwood News Notes

CHICAGO

J. M. Attley of J. M. Attley & Co., spent last week at northern sawmills in which his concern is interested.

C. M. Clark, sales manager of the Swan-Day Lumber Company, Cincinnati, spent Friday and Saturday visiting his trade in Chicago.

E. Harvey Wilce, president of the F. Wilce Company, the big hardwood flooring house of Chicago, arrived in Chicago the middle of last week from the northern Michigan operations which he has been conducting during the last year. He will be in Chicago for some weeks.

Sam W. Richey of Richey, Halsted & Quick, Cincinnati, was a Chicago visitor last week.

John Attley of J. M. Attley & Co., returned a few days ago from a visit to southern mill points.

J. S. Stearns of J. S. Stearns Salt & Lumber Company and other important interests, Ludington, Mich., made one of his regular Chicago visits last week.

A. H. Ruth, director and Chicago manager for the G. W. Jones Lumber Company, Appleton, Wis., visited the home office a few days ago.

F. J. Kuny of the Williamson-Kuny Mill & Lumber Company, Mound City, Ill., was a recent Chicago visitor.

E. C. Tully and W. B. Morgan of the Anderson-Tully Company, Memphis, were at the recent poultry convention held at the Hotel La Salle in this city. They were not so much interested

in the "hen convention" as they were in the crates which they produce in immense quantities for shipping poultry.

J. M. Cheeley, in charge of sales in this district for the Kentucky Lumber Company of Cincinnati spent the greater part of last week in Chicago.

Z. Clark Thwing of the Grand Rapids Veneer Works, Grand Rapids, Mich., spent several days in Chicago last week in the interests of the dry-kiln branch of his business.

Theodore Schneider, in charge of the Big Bay sawmill plant of the Brunswick-Balke-Collender Company, spent several days in Chicago last week.

Lewis Doster, secretary of the Hardwood Manufacturers' Association of the United States, Cincinnati, was one of the Chicago visitors last week.

R. M. Carrier, president of the Carrier Lumber & Manufacturing Company, Sardis, Miss., came up to Chicago last week to assist Lewis Doster to buy a new suit of clothes, and incidentally to secure some sartorial adornments for himself.

Henry Ballou, manager of Cobbs & Mitchell, Inc., of Cadillac, Mich., came over to Chicago from the Detroit convention week before last, where he was joined by his wife and daughter, and the trio spent several days on a shopping tour.

W. B. Heineman of the Heineman Lumber Company, Wausau, Wis., was a recent Chicago visitor.

J. C. Cremer, president of the Cremer Lumber Company, St. Louis, spent a few days with friends in Chicago last week.

Gearhart Knapp, Hamburg, Germany, one of the foreign representatives of the Paepcke-Leicht Lumber Company of Chicago, spent several days in consultation with the principals of this institution last week.

B. F. Dulweber of The John Dulweber Company, Cincinnati, was a welcome Chicago visitor a few days ago.

Walter H. Crim of C. M. Crim & Sons, hardwood manufacturers at Salem, Ind., spent a few days in Chicago last week.

R. van Metre of the Joyce-Watkins Company, Chicago, is home from a recent sales trip.

D. E. Kline, head of the Louisville Veneer Mills, Louisville, Ky., spent a day in Chicago last week en route home from a sales trip to Grand Rapids.

W. E. Heyser of the W. E. Heyser Lumber Company, Cincinnati, was in Chicago a part of last week visiting his trade here, and as usual captured a satisfactory number of orders.

John C. Spry, the timberland magnate, whose offices for several years have been located in the Corn Exchange Bank building, will move to larger and more attractive quarters on Nov. 25, in suite 1003 Harris Trust building, on Monroe street, between Clark and La Salle streets.

The Lumbermen's Club of Chicago announces that it will pull off a pool and billiard tournament, commencing Nov. 4. The prize to the winner, it is announced, will be a gold medal, and other prizes will be offered for high runs. Pool and billiards are getting to be quite a specialty with many members at the Lumbermen's Club, and are developing some very good players. A. C. Quixley, Ben Collins, Jr., and F. M. Baker constitute the committee having the tournament in charge.

The Hayden & Westcott Lumber Company has removed its offices from the fifth floor of the Railway Exchange, Michigan avenue and Jackson boulevard, this city, to suite 822-825, on the eighth floor of the same building. Every room of this suite commands a view of Grant Park and Lake Michigan, and comprises a reception room, private offices for H. S. Hayden, Charles Westcott and the traffic manager of the house, as well as a general clerical and stenographic office. The new quarters is one of the best arranged and best located lumber offices in Chicago.

The Lumbermen's Club announces a German song night, a function which will be held in the club quarters on the evening of Saturday, Nov. 9. Members are invited to bring their steins along. Undeniably there will be "something doing" on the evening in question.

The Penrod Walnut & Veneer Company, with general and sales offices at Kansas City, Mo., favors the trade with a handsome circular covering its various enterprises, involving its Kansas City plant, where American and Circassian walnut lumber and veneers are produced; its Helena (Ark.) plant, where it manufactures rotary-cut southern hardwoods; and its Brasfield, Ark., mill, in which is produced red gum and oak lumber. Of these allied institutions J. N. Penrod is president, Alexander Lendrum, vice-president and general manager Helena plant, R. L. Jurden, secretary and general manager Kansas City plant, and S. F. Prouty, treasurer.

Eugene F. Perry, secretary of the National Wholesale Lumber Dealers' Association, New York, was welcomed by a host of his Chicago friends during his visit here a few days ago in the interest of his organization.

NEW YORK

There was a hot meeting of the creditors of the Charles R. Partridge Lumber Company during the fortnight at the office of the trustee in Jersey City, at which meeting the creditors,

through the valuable assistance rendered by the bureau of information of the National Wholesale Lumber Dealers' Association, succeeded in preventing the passage of some excessive claims for legal services. One attorney put in a claim of \$3,200 on which he was allowed \$2,000, while another attorney claimed the sum of \$15,000 for services and was finally allowed \$750, or about one-fifteenth of what he asked. The trustee's report showed cash in hand of \$129,500, same being sum total of bid for entire assets accepted previously by the creditors; also liabilities of \$60,000, and claims filed of \$450,000, of which \$150,000 is held up for further consideration. A dividend of fifteen per cent. was declared and it is expected that creditors will ultimately receive about twenty-five per cent.

The schedules in bankruptcy of Gouverneur E. Smith & Co., show liabilities of \$695,915, of which \$306,318 is secured, and assets of \$81,368.

Frank B. Afflick, for many years engaged in the wholesale hardwood and storage business in this city, died recently at his rooms in the Empire hotel, this city. The funeral was held from the residence of his brother in Yonkers.

The annual meeting of the New York Lumber Trade Association will be held November 13, at the headquarters, 18 Broadway. The meeting will be preceded by a Delmonico luncheon. A large attendance is anticipated.

The Hausbeck Brothers Company has been incorporated at Elizabeth, N. J., with offices at 215 Broad street, and a capital of \$15,000, to conduct a general lumber business. The incorporators are Lillian, Joseph J., and Franklin Hausbeck.

C. W. Manning, wholesale hardwoods, white pine and veneers, 66 Broad street, has just returned from a lengthy tour of the southern mills where he reports business conditions as very satisfactory. Mr. Manning picked up some desirable stocks for his trade.

The new wholesale house of Meigs & Mackay has just been formed in this city with headquarters at 131 Nassau street. It is composed of E. K. Meigs, Jr., of the E. K. Meigs Company, wholesale lumber, this city, and M. S. Mackay, head of the banking house of Mackay & Co., city. Mr. Meigs retains his interest in the E. K. Meigs Company, but will devote his entire attention to the new firm.

The Doscher-Gardner Company interests of 11 Broadway and Jacksonville, Fla., have organized the Jasper Cypress Company at Jacksonville, with a capital of \$25,000. The output of this new company will be controlled by the Doscher-Gardner Company which enjoys a large trade in the New England and middle states in dressed cypress lumber and finish.

C. W. Witte, wholesale and retail hardwood lumber, 110 Nassau street, Manhattan, has removed his storage yard from Fremand street, Brooklyn, to Chapman's Docks, Brooklyn, and will carry a full line of materials suitable for the local trade.

Monroe & Co., hardwoods, headquarters Baltimore, Md., have opened a New York office at 2255 Broadway, Manhattan.

The sympathy of the trade is extended to John W. Hussey in the loss of his wife who died recently at her home in this city. Mr. Hussey was for many years prominent in the domestic and export hardwood trade, but retired from active business several years ago. Mr. and Mrs. Hussey celebrated their fiftieth anniversary on the day previous to Mrs. Hussey's death.

Bush & Fassett, 1123 Broadway, have added a hardwood department under the management of Warren O. Cawley, who has been identified with the local hardwood trade for many years.

The Norfolk Lumber Company, specialist in hardwood flooring, has opened a warehouse at 245-9 East One Hundred and Thirty-seventh street, Bronx, to which location it has transferred its office. It will carry a complete line

of stock, including maple, birch and beech stock, parquet squares, herring bone and strips 5-16 and 13-16 inch thick, etc. The warehouse is equipped with steamheating apparatus which keeps the stock in fine condition.

BUFFALO

H. A. Stewart of I. N. Stewart & Bro. has gone on a month's trip to West Virginia to look after shipments of hardwoods. The office reports a general scarcity of low-grade poplar.

Hugh and R. D. McLean, who have been spending some time recently at their southern mills, where inventory has been taken, returned in time to cast their votes here.

The Standard Lumber Company is filling its new yard on Baitz avenue with a good stock of oak, chestnut and other lumber. The improvements to the new office are now completed.

The yard of O. E. Yeager is selling quite an amount of quartered oak, on which prices have taken an upward turn lately. Business is reported good in this lumber.

G. Elias & Bro. state that the hardwood trade is in normal condition at present and has not shown any particular boom. Hardwood receipts have lately been coming in all-rail.

M. M. Wall states that the Buffalo Hardwood Lumber Company finds a pretty fair amount of trade at present and that orders are placed to a larger extent without solicitation than formerly.

The National Lumber Company has closed up its lake receipts of hardwoods for the season, having brought in a good assortment of maple and birch. Flooring is holding very strong.

Anthony Miller is getting in stocks of several hardwoods and states that trade at his yard is holding up satisfactorily and the volume is not far from that of a month ago.

T. Sullivan & Co. report that tonnage for bringing in lumber is scarce and high-priced this month.

W. Clyde Sykes, son of W. L. Sykes of the Emporium Lumber Company, was at the family home here a few days last month, before removing to his new home at Conifer, in the Adirondacks.

Lumbermen gathered at the Chamber of Commerce rooms on election night to join in the crowd assembled to receive the returns. A special wire service had been arranged for, and it was expected to hold out until midnight, whichever ticket won. With the lumbermen divided between three parties, instead of two, there was quite a diversity of political opinion expressed during the present campaign, and some members of the trade took an unusual interest in the subject of politics.

PITTSBURGH

The Aberdeen Lumber Company has 150 cars of gum and cottonwood on sticks at a Mississippi river port in Louisiana and is waiting patiently until it can get a barge down to bring this stock up to Joppo and other towns in the Middle West for distribution. This company was elected a member of the Pittsburgh Wholesale Lumber Dealers' Association last week.

The Western Lumber Company had the largest shipment in October of any month in its history. Hardwoods are showing up well in its orders and its eastern trade is looking good. President W. W. Wilson, Jr., recently made a long trip through the Northwest.

The Kendall Lumber Company shipped an average of twenty-five cars of lumber per day in October. Of this amount seventeen cars are hardwood. Its secretary, G. M. Chambers, reports a strong demand for good hardwood and believes that prices are going to be higher.

The Henderson Lumber Company says shipments of hardwoods are hard to get. It cannot get enough posts and mine stuff to supply the general demand, for all coal mining companies are buying heavily. Oak bill stock, according to President J. F. Henderson, is extremely scarce.

The Allegheny Lumber Company says this is the sawmill man's market and that the wholesaler needs to use great caution in quoting on future deliveries. The company's officials note a pretty strong call for all kinds of good hardwood stock, but complain much of a car shortage.

The Northwest Lumber Company of Humboldt, Cal., which is composed principally of capitalists of Kane, Pa., has sold its holdings to the Redwood Lumber Company of Eureka, Cal., for about \$500,000. The officials of the company are as follows: President, W. Campbell of Warren; vice-president, David Howells; treasurer, Dr. E. J. Sweeny; secretary, Franklin E. Uhl, all of Kane, Pa.

I. F. Balsley, president of the Balsley & McCracken Company, the new hardwood firm in the First National Bank building, announces a fine business. He recently booked a big order for chestnut at a good price.

The Mutual Lumber Company is another new hardwood firm in the First National Bank building which is coming right to the front. Their trade with the industrial concerns and factories is starting off very nicely.

Manager Brown, of the hardwood department of the American Lumber & Manufacturing Company, reports a little dropping off in demand, due chiefly to election time. He believes that trade will be uniformly good all winter and feels that the scale of prices must be advanced if stocks do not increase any more than at present.

The Pittsburgh Wholesale Lumber Dealers' Association held a very successful bachelor dinner at the Fort Pitt hotel the evening of Oct. 29. President Louis Germain, Jr., was in the chair. More than that, he was in his element. Every member of the association—and there are now twenty-nine—had to make a speech. The worst of it was that most of them had to sing a song. Other really good music was provided, but the general hilarity caused by the efforts of the members themselves was the big asset of the meeting.

The joint quarterly meeting of the Pittsburgh Retail Lumber Dealers' Association and the Pittsburgh Wholesale Lumber Dealers' Association will be held the evening of Nov. 11 at the Hotel Henry.

PHILADELPHIA

Wistar, Underhill & Nixon have recently organized the Penn-Sumter Lumber Company. The officers are: R. Wyatt Wistar, president; Samuel Roberts, vice-president; Frederick S. Underhill, treasurer; Jacob Eisenberger, secretary. The company has acquired 4,000 acres of timberland in Clarendon county, South Carolina, with a probable yield of 30,000,000 feet of excellent short and long leaf yellow pine. Mr. Wistar has recently returned from South Carolina, where he has been superintending the erection of the firm's mill which is expected to commence operation about the middle of November. Wistar, Underhill & Nixon promise prompt filling of orders as they have excellent facilities at this point for quick shipments. Frederick S. Underhill reports good incoming business. He says their hardwood yard at Basic City, Va., which will soon be in proper shape, will enable them to carry a stock of about 2,000,000 feet of oak, poplar, chestnut, maple and basswood.

Schofield Brothers report a humming business. Robert W. Schofield, who recently returned from Schofield, S. C., where the manufacture of their lumber is carried on under the name of the Saltkeatchie Lumber Company, says the mill is

pushed to the limit. As there is very little competition in their immediate neighborhood, they have not been hampered by the car shortage and consequently are in a position to make prompt shipments.

Harry Sayer of the Walterboro Lumber Company, Walterboro, S. C., made a short stay in Philadelphia recently, calling on his old friends.

J. Gibson McIlvain, Jr., of J. Gibson McIlvain & Co., says except for the protracted difficulty in obtaining cars at shipping points, business is running smoothly. Mills are running full capacity and prices are firm. The firm recently engaged Walter W. Kelley, formerly of the Rock Island Railroad, as traffic manager.

George F. Lance of the Schofield-Lance Company, Reading, Pa., recently paid a visit to the Philadelphia office. He says trade conditions are eminently satisfactory. The car shortage does not affect the company in Reading, goods being shipped as fast as orders are booked.

Howard B. France, secretary and treasurer of the Monarch Lumber Company and of the Had-dock-France Lumber Company, has returned from the company's mill at Sterling, N. C., and reports that the plant is rushed filling orders, but it is next to impossible to obtain adequate cars to ship stock. Inquiries are increasing, resulting in good orders, and the outlook is bright for continued prosperity.

Edwin B. Malone and Augustus J. Cadwallader have returned from their annual moose hunting trip through the Maine woods. It is to be inferred that the inconspicuous moose saw those brave nimrods first and, objecting to a closer interview, wisely took to their heels. The sports men, however, brought back seven fine deer and lots of pheasants.

Jerome H. Sheip, who is well known in lumber circles, and Mrs. Sheip recently celebrated the twenty-fifth anniversary of their marriage and incidentally the fiftieth birthday of Mr. Sheip. A goodly number of friends gathered at their home to tender their congratulations. It goes without saying that it was a big time, for wherever "Jerry" Sheip is host one may look for an entertainment long to be remembered. Mr. Sheip is about to make a visit to his cigar box plant at Mobile, Ala., which he reports rushed with orders. He expects soon to get back in the hardwood lumber business.

Samuel H. Shearer of Samuel H. Shearer & Son says business keeps lively. There is no trouble selling goods, but delivering the stuff at this time is another proposition. William P. Shearer is traveling through North and South Carolina, looking after shipments and incidentally closing some contracts.

W. J. Mingus of Mingus & Rutter says there is nothing the matter with business at this time. They can sell all the stuff they can cut, but the car shortage is greatly interfering with prompt delivery.

George P. DeWitt of the Maris-DeWitt Lumber Company says the fall trading is excellent and the winter business promises to be good. All that is lacking now is adequate car service.

Thomas B. Hammer of the Hammer Lumber Company reports mills pushed to the extreme on orders. A large portion of the product is shipped by water, and as the company is disposing of a vast amount of stuff it has trouble obtaining vessels.

The Foster Creek Lumber Company, New York, was recently incorporated with a capital of \$500,000.

The Wilkinson Timber Company, New York, was recently incorporated under Delaware laws with a capital stock of \$400,000.

BALTIMORE

Secretary J. McD. Price and J. Craig McLannan in behalf of the National Lumber Exporters' Association, last week filed with the Interstate Commerce Commission at Washington a complaint against thirty-two railroads both east

and west of the Mississippi river because of their refusal to issue through bills of lading on export lumber and logs except under conditions that are practically prohibitory. The commission is asked in the petition to issue an order requiring the railroads named to issue through bills of lading as is done on other commodities, and charging that lumber and logs are being unfairly discriminated against.

Among foreign representatives who have visited this market recently are A. Temple Dobell and Robert Lyle Dobell of Alfred Dobell & Company, London and Liverpool. They visited a number of the hardwood exporters here, then went on to Pittsburgh and Cincinnati, from whence they plan to go to New Orleans. Mr. A. Temple Dobell stated that trade conditions on the other side were very encouraging and that an excellent inquiry was in progress.

G. Mertens, representing F. W. Barth & Co., Hamburg, Germany, was another visitor in search of suitable stocks. He reported that the outlook in Germany was most promising, with an active demand prevailing.

Gearhart Knapp, representing Richard Koller of Hamburg, Germany, recently came to Baltimore for the purpose of establishing American connections with his firm. He was especially after walnut, poplar and oak logs, and intended to visit a large part of the country.

Robert McLean, a well-known Baltimore lumber exporter, returned last week from a trip abroad, which was unusually protracted by reason of the illness of his wife. Mrs. McLean's condition, however, has now greatly improved. Mr. McLean arrived in New York on Monday of last week. While abroad he visited a number of ports, getting in touch with buyers and obtaining information about the state of the lumber trade which confirmed his former impression, that the inquiry is active and that the future looks bright.

J. Taliaferro Bridges, a lumber dealer at Hancock, and his wife, Sarah I. Bridges, made a deed of trust last week to J. Augustine Mason and F. Wilbur Bridges, attorneys, for the benefit of the creditors of Mr. Bridges. The trustees were required to give a bond of \$100,000, about half the estimated value of the assets.

Norman J. Warner, who is in charge of the Asheville office of Richard P. Baer & Co., Maryland Trust building, Baltimore, was here for several days last week, having come up to confer with the members of the firm.

Joseph T. Steinacker, Jr., only son of Joseph T. Steinacker of the J. T. Steinacker Lumber Company, Baltimore, died at his home here recently. He was born in Baltimore twenty-six years ago, and after finishing his education entered the business of his father, being made secretary-treasurer of the company. His health gave way, however, and he had been traveling extensively in Switzerland and other parts of Europe in the hope of regaining his physical vigor.

COLUMBUS

Innis Creighton, general sales manager for the W. M. Ritter Lumber Company (Limited) of England, is a visitor at the Columbus office of the concern. Mr. Creighton spent a considerable time in the lumber business in the state, although he is an Englishman by birth. He is at present located at Liverpool and also has a branch office in London. Mr. Creighton says trade conditions in England show good improvement and he expects a big year in the export trade.

According to the report of city building inspector, there were 265 permits issued during October, as compared with 283 for October, 1911. The valuation of the buildings projected in October, 1912, was \$341,000, as compared with \$421,000 for October, 1911. Since January 1 building permits to the number of 2,370 have been issued for a valuation of \$4,269,000, as

compared with 2,427 permits in the corresponding period in 1911 and a valuation exactly the same.

L. B. Schneider, sales manager of John R. Gobey & Co., reports a good demand for all hardwoods, with prices ruling firm in every particular. He says the car situation is about the same and he expects very little relief at this time.

F. B. Pryor of the W. M. Ritter Lumber Company says orders in all lines of hardwoods are holding up steadily, with a good run from all sections. Stocks are very much broken and the jobber can pick out what he wants to sell. Factories are buying better than yards at this time. Car stocks are in good demand and railroads also are buying better.

R. W. Horton of the W. M. Ritter Lumber Company left early in November for a business trip to Pittsburgh and Buffalo.

A. C. Davis of the A. C. Davis Lumber Company says trade in hardwoods is good and prices are well maintained.

W. L. Whitacre of the Whitacre Lumber Company says orders are a little slow now because of the approach of winter and the high prices which prevail. He says dealers are not inclined to carry heavy stocks through the winter.

M. A. Hayward & Son say trade is good in all lines of hardwoods, especially oak flooring. There is a good demand for all grades and prices are firm to the extreme.

The Sowers-Leach Lumber Company says hardwood demand is holding up well with every indication of a continuation of the high prices.

CINCINNATI

S. W. Richey of Richey, Halsted & Quick says "Business with us never was better—in fact we have had no complaint to make any time this year except in the early spring when it was difficult to get prompt shipments from the mills. We look for a continuation of present conditions." John Byrns of the Conasauga Lumber Company is optimistic regarding future business conditions. The mills of his concern never were busier and they have more orders at present than can be promptly filled. The car shortage is somewhat to blame for conditions at present but Mr. Byrns is of the opinion that the demand for all kinds of hardwoods and white pine, which is the company's specialty, will increase.

Walter E. Johns of the Johns-Mowbray-Nelson Company, which is handling the output of a couple of large gum mills, making this class of wood its specialty, states that it has been doing very well and business is growing steadily better.

The big poplar mills of the Swann-Day Lumber Company are running extra time and have been for the past several months. C. M. Clark, the local representative of the company, when asked his opinion of the prospects said, "We are not pushing for business, but merely taking care of trade as it comes and expect next year's business to go ahead of 1912, which is more than satisfactory so far."

Ben Dulweber of the John Dulweber Company, which conducts one of the largest hardwood yards in the city, is well pleased with prevailing conditions. The company has been doing a little better each month this year and at the present time is doing a capacity business. Its band mill in Kentucky is running extra time.

Mowbray & Robinson are doing the biggest business in their history. At both of their big hardwood yards in the city stocks are none too heavy and the three big band mills at Quick-sand and Irvine, Ky., are being pushed as much as possible.

Fred Mowbray is spending a good part of his time at the mills and Ed Robinson looks after the yard end of the business here.

W. A. Bennett of Bennett & Witte is still on the road making a northern trip. Mr. Bennett's main object on this trip is introducing

his new son-in-law, Mr. R. A. Betts, Jr., into the trade. Mr. Betts is to go over the territory regularly as soon as he becomes acquainted, thus relieving Mr. Bennett of much road work.

TOLEDO

Work will be begun within a few days on the construction of a large addition to the plant of the Haughton Elevator & Machine Company, Huron and Lafayette streets, Toledo. The building will adjoin the rear of the present plant and will have a frontage on Erie street of 80 feet and a depth of 114 feet. The structure will be one-story, brick, and will be used by the company as a woodworking department. This concern is one of the largest and most prominent of the independent elevator manufacturers in the country and has expanded so rapidly that the addition is imperative.

A fine tract of walnut timber, said in fact to be the finest in the country, was sold near New Burlington, O., recently, the Francke Lumber Company of Cincinnati, being the purchaser. The price paid was \$27,000. Firms from all over the United States and Europe have tried for years to buy these trees without avail. Men are now on the ground removing the trees, many of which are being taken out by the roots. The lumber will be shipped to Germany.

R. P. Burkhardt, Sr., president of the Stomps-Burkhardt Company, chair manufacturer of Dayton, O., died recently at his home in that city, aged sixty-seven years. He began his business career at the age of thirteen years as an errand boy for the Cabinet Makers' Union at \$1.25 a week. When in 1890 G. Stomps & Co. were reorganized he was made vice-president and general manager, and a year later, following the death of Mr. Stomps, became president of the concern. Four children survive their father, two boys and two girls. The boys, Richard P. Jr., and William M., hold responsible official positions with the firm of which their father was the head.

MEMPHIS

The movement of timber to Memphis during October was perhaps the largest on record for the corresponding month. Certainly it was the heaviest recorded for several years. The Valley Log Loading Company has not made up its complete returns, but Mr. Dickson is authority for the statement that the amount of logs loaded for Memphis mills during the month was more than 1300 cars. He is also authority for the additional statement that the quantity of timber awaiting transportation is rather large, totaling several thousand cars for Memphis. The foregoing figures are confined entirely to the Yazoo & Mississippi Valley line of the Illinois Central system and do not have any bearing on the other roads entering this city. It may be noted, however, that the quantity of timber brought in by the other roads is limited as compared with that handled by the Yazoo & Mississippi Valley.

There has been a slight improvement in the car situation and this is reflected in a little more prompt movement of both lumber and logs. The situation at Memphis proper has been very serious so far as outbound shipments were concerned, but there has been considerable trouble at interior points and also in securing cars for transportation of lumber and logs to this city. Lumbermen believe that there will be more or less car shortage and some delay in the movement of lumber for the next few weeks.

A very striking feature of the local situation is to be found in the fact that, despite the free movement of logs to Memphis during the past few weeks and despite the steadiness with which the mills have operated, there has been no increase in local stocks. As a matter of fact there is an actual scarcity in some directions and

stocks are quite badly broken in some lines. Every effort has been made by lumbermen both here and through the Memphis territory to replenish their stocks against the expected heavy winter demand, but only moderate progress has been made in this direction. Wholesale dealers are making efforts also to increase their stocks, but they likewise are meeting with indifferent success.

Owing to the fact that there has been a failure in the efforts to pile up lumber against the expected demand, it is anticipated that the market will be very firm during the next few months. The promised larger log supply made some members of the trade believe that there would be a lower market when the lumber manufactured from these logs was placed on sale. The indications along this line, however, have not been borne out by actual developments and there is not only a good demand for practically all kinds of hardwood lumber but prices are well maintained, with every promise of continued firmness.

Advices have been received by J. H. Townsend, manager of the Lumbermen's Traffic Bureau, from the Interstate Commerce Commission at Washington informing him that the St. Louis Southwestern (Cotton Belt), the St. Louis, Iron Mountain & Southern, and the Rock Island systems had filed tariffs with that body giving an advance of two cents per hundred pounds on hardwood shipments from points in Louisiana and Arkansas to Memphis. The bureau, through Mr. Townsend, has already requested the commission to suspend the proposed advance until such time as the lumbermen here and throughout the affected territory may be given a hearing. The principal contention to be made by the lumbermen here, through the bureau, is that present rates are high enough and that the proposed advance will carry them to a level which is both unreasonable and unjustifiable.

S. B. Anderson of the Anderson-Tully Company, has sold his handsome home at Poplar Avenue and Waldran Street to A. E. Jennings of Greenwood, Miss. The consideration is understood to have been approximately \$45,000. Mr. and Mrs. Anderson will temporarily make their home with their son, H. B. Anderson.

Building operations in Memphis during October were slightly in excess of \$750,000 or more than double the corresponding month last year. There has been marked activity during the first ten months of the current year, with the result that the figures up to this date have been \$6,199,285, an increase of \$1,154,550 over the same period last year. It is anticipated that the figures for the year will easily surpass other previous records.

W. H. Russe of Russe & Burgess, Inc., F. B. Robertson of the Anderson-Tully Company, Elliott Lang of R. J. Darnell, Inc., O. M. Krebs of the McLean Hardwood Lumber Company, W. A. Ransom of the Gayoso Lumber Company, Mr. Lear of the Green River Lumber Company and F. F. Fee of Dermott, Ark., spent some time in New Orleans the latter part of the past week. They went to that point to hold a conference with the officials of the railroads and steamship lines entering that port. The steamship and railroad companies have made a number of new regulations governing export traffic, and the conference was held for the purpose of ascertaining just exactly where the lumber exporters stood. These gentlemen represented, as a committee, the National Lumber Exporters' Association. W. H. Russe was chairman. The conference was entirely informal and no information has been given out by the committee as to what was accomplished.

The hearing before the Interstate Commerce Commission here some days ago, involving milling in transit rates, brought out very clearly the contention of the plaintiffs that they preferred a lower flat rate into Memphis than the present system of refunding part of the cost of inbound shipments of logs when the lumber

manufactured therefrom has been shipped out over the lines by which the inbound shipments were made. Elliott Lang and several of the representatives of the plaintiffs, May Brothers et al., contended that it would be much fairer to lumber interests at Memphis if the rate were made lower and lumbermen were left to ship their products over any line they saw fit. Very particular emphasis was laid upon the fact that it was frequently either inadvisable or undesirable to make shipments of lumber out over the same line that brought in the logs and that in all such cases the shipper lost the benefit of the refund. It was also pointed out that it was necessary frequently to use the longer instead of the shorter haul in order to secure the refund. The Interstate Commerce Commission has taken the case under advisement.

The Bellgrade Lumber Company has cut out much of its timber at Cathey, Miss., and is looking to the future. It has already purchased about 3200 acres of land near Isola, Miss., and will remove its mill and logging outfit from Cathey to Isola within the next few months. The company has cut some ten to twelve million feet of hardwood lumber a year at Cathey and Belzoni during the past several years. The site for the mill at Isola has already been secured.

The Interstate Commerce Commission has again awarded decision in favor of local lumbermen in the Pacific coast cases. The trans-continental roads announced some months ago that they proposed to advance rates from seventy-five to eighty-five cents per hundred pounds. The freight bureau and the Lumbermen's Club of Memphis took up this subject and went before the Interstate Commerce Commission. That body has just decided that the advance to eighty-five cents is unreasonable and unjustifiable and has ordered that the present rate of seventy-five cents be retained. The ruling affects Memphis and all Mississippi river points. This is the second time the Memphis lumbermen have been successful in restraining this advance. They won a similar victory several years ago in the case of George D. Burgess et al. vs. the Trans-continental Freight Bureau.

INDIANAPOLIS

T. R. Lewis of the Burnet-Lewis Lumber Company has returned from a southern trip.

C. F. Gray, a lumberman of Meridian, Miss., was in the city for a few days recently.

T. A. Winterrowd, city building inspector, reports that permits issued by the city in October amounted to \$757,445 as compared with \$777,325 in October 1911.

In October the value of walnut, rosewood and mahogany logs passing through the Indianapolis custom house was \$26,540, which is above the average. They went to various piano, veneer and furniture manufacturers over the state.

Fred C. Gardner, treasurer of E. C. Atkins & Co., expects to make his final report soon as receiver for the Atlas Engine Works. Mr. Gardner has sold the Atlas property and business to the Lyons-Atlas Company, composed of Chicago men, for a consideration of approximately \$1,500,000.

The Indianapolis Trade Association will make its twelfth trade extension trip Nov. 12, 13 and 14. A special train has been arranged for and merchants and dealers in thirty-nine Illinois cities and towns will be visited. The association has just adopted a new reciprocity plan. When the salesman for one line of goods finds a merchant in the market for something the salesman's house does not handle, he will notify the association, which will turn the information over to concerns handling the line in which the merchant is interested. About twenty lumber concerns belong to the association, which includes more than 250 manufacturers, wholesalers and jobbers representing all lines of trade.

NASHVILLE

Some of the best virgin forests in the South are involved in the fate of the Bon Air Coal, Iron & Lumber Company, which has been in the hands of a receiver for more than a year. The case was to have come up recently in the chancery court, but was postponed, as efforts are being made by some of the largest stockholders to effect a reorganization of the company, which has combined properties to the value of \$6,000,000 or \$8,000,000. Gen. Robert Vaughn, clerk and master, and one of the receivers, had a measurement of the timber on the lands of the company made by order of the court. Two tracts of 15,000 acres each in Wayne county have by measurement 102,672,000 feet of timber, 501,000 oak railroad ties, 75,000 pine ties, 14,000 cords of chestnut bark and 6,500 chestnut telephone poles. Between 45,000 and 50,000 acres in White, Cumberland and Van Buren counties have 152,000,000 feet of lumber, according to the report of the expert. The timber includes large quantities of red and white oak, ash, hickory, walnut, poplar and other native hardwoods of Tennessee. No steps have yet been taken in development, the company's attention having been devoted to coal and iron.

Lumber trade in the Nashville market is feeling the effect of the car shortage. Cars are more scarce on the branch railroads, which furnish many logs to this market, than here. Shippers get fairly satisfactory service in moving out lumber, but there is much difficulty in getting inbound freight from the branch lines.

The building permits at Nashville for the month of October amounted to \$66,518, against \$73,632 for the same month last year.

The Hardwood Manufacturing Company, recently incorporated with authorized capital stock of \$35,000, is making active preparation for future business. The company is putting in a 5½-foot band mill at Tullahoma, Tenn., where it will have headquarters. The mill will be used to supply material for a large furniture factory there. Harry Parker, general manager, and Frank P. McDowell, superintendent, have been connected with the lumber trade at Tullahoma many years.

A. E. Wiede, representing the Antoine-Govers Company, Antwerp, Belgium, has been in Nashville, coming here to make some purchases of hardwoods for his company. It is understood that he closed some contracts for oak.

Fire destroyed the big sawmill of the Graves-Gilliland Company in east Nashville, causing a loss of \$7,000, with \$5,000 insurance. The company is now taking steps to rebuild, and arrangements have been made for a seven-foot modern band mill. The company has a large custom sawing business.

J. Barthell Joseph, a popular Nashville lumberman, has accepted a position with the M. B. Farrin Lumber Company of Cincinnati. He will be connected with the buying end, and will have headquarters in Nashville. He was formerly with the Tennessee Hardwood Lumber Company of this city.

The Davidson, Hicks & Greene Company has been gradually increasing its holdings of timberlands in Franklin county, and now has acquired about 15,000 acres on which it is estimated that there is 75,000,000 feet of hardwood timber.

LOUISVILLE

Friends of A. E. Norman, president of the Norman Lumber Company, have extended condolences following the recent death of his mother, Mrs. Lucinda Van Dyke Norman, who passed away at an advanced age. Mrs. Norman was a member of a pioneer family of Kentucky, and had numerous prominent connections.

The Falls City Lumber Company, of which Charles H. Stotz is the head, has moved its

offices from the Keller building to the new eighteen-story Inter-Southern Life building, which has just been completed. It is the largest office building in Louisville.

The Von Behren Manufacturing Company of Evansville, and the Himmelburger-Harrison Lumber Company of Cape Girardeau, Mo., were the principal complainants in a case heard in Louisville by C. C. McCord of the Interstate Commerce Commission, involving the reasonableness of Frisco rates from southeastern Missouri, the movement chiefly involved being from Morehouse, Mo., to Thebes, Ill. At the same hearing Young & Cutsinger, Evansville sawmill operators, presented proof in their petition for refunds on log shipments which they received during the time the Louisville & Nashville had a milling in transit arrangement allowing only six months in which to move the lumber manufactured. This was later increased to one year, and the lumbermen showed that the six months allowed constituted too brief a period for the completion of the movement. They also presented an agreed case whereby the Illinois Central is to refund part of the freight charge on logs shipped from a blind siding, the tariff applying to which did not state, as it should have done, that the milling in transit arrangement was to be used.

The New Albany, Ind., Veneering Company has been forced to run its panel plant over-time of late on account of the large increase in the demand. The furniture trade especially is active, according to the report of President and General Manager E. V. Knight.

By a recent purchase of timberland adjoining its holdings at Holly Ridge, La., the Norman Lumber Company of Louisville, has now sufficient timber to insure the continuance of its operations there for at least twelve years, and possibly longer. It purchased 7000 acres, containing oak, gum and other wood. The mill is now running steadily, cutting about 35,000 feet a day. E. B. Norman, vice-president of the company, will give practically his entire time and attention to the Holly Ridge operation.

The Louisville Hardwood Club has supplied to the bureau of foreign and domestic trade commerce of the Department of Commerce and Labor statistics requested by the bureau for use in compiling a national directory of commercial organizations of the United States.

ST. LOUIS

A falling off of \$160,024 in the cost of the buildings authorized during October by the building commissioner as compared with the same month last year was shown in the summary given out on Nov. 1.

Receipts of lumber last month were 16,294 cars by rail and none by river. Receipts for October last year were 13,757 cars by rail and none by river or 2,537 cars more by rail this year than last. Shipments by rail last month were 11,310 cars and none by river. Shipments during October, 1911, were 9,615 cars, showing an increase of 1,695 cars.

W. D. Reeves, head of the W. D. Reeves Lumber Company, one of the largest manufacturers of hardwoods in Helena, Ark., was a visitor in the city. He brings a good report on the present conditions of the hardwood business in his section of the country.

Thomas E. Powe, president of the Thomas E. Powe Lumber Company, who with his wife and daughter has been on a visit to his old home at Cheraw, S. C., has returned home from a most enjoyable stay.

W. W. Dings, secretary of the Garetson-Grease Lumber Company, says its three mills have practically been compelled to go out of business on account of the car shortage. The company is getting very few cars and can not fill the orders it is receiving. Inquiries are most numerous, and if the company could get out only half the orders it receives, it would be quite busy.

G. P. Shehan of the Berthold & Jennings Lumber Company, says it is very hard to get the number of cars required for shipping purposes, although the company is doing its very best to secure them.

The Charles F. Luehrmann Hardwood Lumber Company is receiving quite a number of orders and has been very successful in being able to get cars. The company is filling the orders from its local yards, where it has a good stock on hand and ships with very little delay.

Business has been very satisfactory with the Thomas & Proetz Lumber Company. Charles E. Thomas says his company's business during the month of October was very satisfactory and considerably ahead of any October for a long time. It has a big stock of the very best of hardwood lumber down at its mill at Belzoni, Miss., and is nicely fixed to take care of the fall and winter business which Mr. Thomas feels sure will come.

E. W. Blumer, sales manager of the Lothman Cypress Company, states that business has been quite good during last month. His company has a splendid stock of cypress on hand and the mill in the South is working full time. It has been quite fortunate in getting cars, as the road running to its mill has not been as much crippled for lack of cars as some of the other lines.

The Lumbermen's Club of St. Louis will hold its November meeting and dinner at the Planters hotel on the evening of Nov. 12. The entertainment committee has secured Rev. Martin S. Brennan, a well-known local astronomer, as the principal speaker. He will give a lecture on "The Starry Way." Rev. Mr. Brennan is well known all over this country and in Europe as a lecturer on geology and astronomy. In addition to the lecture, there will be a musical programme. The meeting promises to be a most enjoyable affair.

MILWAUKEE

The Milwaukee building department has just issued its annual report for 1911, which shows that there were erected during that time buildings, the total cost of which aggregated \$6,113,086. The building operations for 1912 are expected to exceed those of last year by far. During the first nine months of this year the building operations exceeded those for the same period of last year by \$2,420,440.

D. L. Van Auken of Milwaukee, representative of southern Wisconsin and northern Illinois for the John D. Mershon Lumber Company of Saginaw, Mich., has returned from a two months' trip on the Pacific coast, where he visited the mills of the Pacific Lumber Company at Scotia, Cal., and the shipping centers at Oakland and Wilmington. Mr. Van Auken is enthusiastic over the big hardwood prospects here.

The Gidding & Lewis Manufacturing Company of Fond du Lac has had improvements made on its plant in which it manufactures a well-known line of sawmill machinery. The concern has now one of the most up-to-date plants in its line and is prepared to handle orders of any size.

Two new lumber plants are rapidly nearing completion so that work can be started very soon. The Heineman Lumber Company at Merrill is erecting one of the largest sawmills in the country, most of the buildings having been completed and machinery now being installed. The new Tomahawk Box Company's plant now in course of erection is to replace the one destroyed by fire early this summer.

The sawmill of the Peshtigo Lumber Company was completely destroyed by fire on October 27, causing a loss of \$100,000. It was one of the largest mills in this section. The power was derived from a dynamo run by water power. An overheated journal box is said to have caused the fire. Nothing authoritative in regard to rebuilding the mill has as yet been announced. Wm. Templeton is president.

CADILLAC

Superintendent L. Van Meter of the A. L. Dennis Salt & Lumber Company's mill at Dighton, twelve miles south of Cadillac, has moved his family to Whitney Out., where he will manage the operations of the Dennis-Canadian Lumber Company, an out growth of the A. L. Dennis Salt & Lumber Company of Grand Rapids, Mich. Mr. Van Meter is well up in his line and the well wishes of his former employes and friends in this vicinity go with him.

W. B. Barrows and George W. Pothemus of the United States Forest Service, Washington, D. C., are taking measurements of beech and maple at Cummer-Diggins camp No. 13 with a view of compiling a series of tables for the Forest Service department at Washington.

The Cummer-Diggins Company's sawmill has after several days' shut down resumed operations again. This company has opened a new camp in Colfax township, known as Camp No. 13, and will log in that vicinity the entire winter. In addition to this a large amount of timber will also be put in for the company by contract.

The Cadillac Handle Company's mill is closed down for three weeks when a general overhauling will be made after which its logs will be forwarded in train loads over the G. R. & I. during the entire winter.

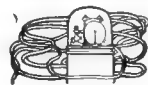
The Du Roy Manufacturing Company, Park Lake, Osceola county, is enjoying unprecedented activity. Starting with a force of less than ten men, it has increased its pay roll to fifty. This company turns out 150,000 pieces of wooden ware specialties daily. It has purchased some automatic machines that have a capacity to turn out from 40,000 to 60,000 pieces daily. It manu-

factures almost everything in the line of wooden novelties and is one of the best equipped plants of its kind in the country. Irving R. Du Roy is the manager.

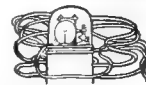
The State Railroad Commission has approved the proposed line of Boyne City, Gaylord and Alpena, with the exception of one crossing in Alpena. Its approval has been withheld from this with the desire of obtaining a union depot with the Detroit & Mackinac Railway.

On account of increased orders the Michigan Buggy Company's plant at Kalamazoo has been compelled to build a large addition, 180 feet in length by 650 feet wide, and three stories high, in which three hundred additional men will be installed. In order to keep up with orders it will be necessary for the company to make twenty-five cars per day. Their 1913 "Michigan" car is considered to be among the best of forty-horsepower machines on the market.

The State Industrial Accident Board reports 2,000 accidents the first two months of its existence, a large proportion of which were minor. The insurance feature of the new industrial compensation act will save the employers of labor thousands of dollars, from the fact that a manufacturer or an employer of labor can go to the commissioner of insurance and arrange for mutual insurance for the actual cost less many overhead charges, such as office rent, heat, light, solicitors, etc. This has forced many of the Liability Companies to greatly reduce their rates. Under the scheme of insurance proposed by the state, the cost of insurance is pro-rated among subscribers according to their risk; it also allows members to withdraw upon thirty days notice at the end of a year, providing they have paid their pro rata share of the expenses during the year, as the act provides that the estimates shall be adjusted at the end of each year.



The Hardwood Market



CHICAGO

Hardwood trading in the local market goes on with unabated vigor. The demand is heavy and there seems to be an active demand for nearly every item of hardwood lumber. Some remarkable stories are told of extraordinary profits being obtained on odd lots, but, on the whole, a very conservative system of buying and selling is going on. Plain oak in all grades is the scarcest item, although many varieties of northern woods are almost as impossible to obtain in quantity.

Heavy local purchases for car materials on the part of railroad and car companies is the feature of the past fortnight.

NEW YORK

The hardwood market at New York continues to show strength. Supplies are not over plentiful and prices are firm with a constant upward tendency, especially on good lumber. Car shortage is holding up shipments in many instances, which tends to curtail actual transactions, but as far as demand is concerned and its relation to available supplies, there is every indication that there will be a firm market throughout the winter.

BUFFALO

The demand for hardwoods continues satisfactory and dealers state that not much pushing has been needed to keep business going in fair

shape. Inquiries have been coming in more freely and for a larger variety of woods. The yards are well supplied with stocks and forehanded dealers laid in a large amount of lumber in anticipation of a car shortage. There are usually cars enough in Buffalo to keep shipments going without much delay.

Plain oak is stronger than it has been for some time, and moves out about as fast as it comes in. Stocks are hard to get in quantity. Quartered oak is stronger and furniture factories are placing a fair number of orders. Even common quartered oak, which has been slow for a long time, is now selling to some extent. Other woods are generally firm in price, with poplar forming the chief exception, although low-grade poplar is scarce and holds up better in price than formerly. Both maple and oak flooring are now bringing an unusually stiff price.

PHILADELPHIA

Instead of the minimum activity so often coincident with the presidential election, the hardwood lumber business in this section has continued brisk during the fortnight. An increasing number of inquiries are resulting in good orders, the only problem of the manufacturers being how to get cars to ship the stuff. Many dealers say they can get plenty of orders but are in a quandary as to where to find the stock. Yards are stocked to only about three-fourths of their capacity, and, as the consuming industries are buying more freely, the pile is rapidly diminishing, with but little hope of an early replenishing of vacant spots because of the existing traffic congestion. Under these conditions it is only natural that prices should advance, and the

man who neglected to secure his stock ahead will now be obliged to pay considerably more money for his goods.

Stocks generally continue below the present demand and values are moving upward. Oak continues a leader, and quarter-sawed oak is advancing; chestnut is stronger, the call for sound wormy increasing; gum is said to be piling up at the mills and weakening in value, but a careful investigation in the eastern market does not sustain a report of a break in this wood, the demand being strong and prices well maintained; cherry is increasing in demand; cypress is stiffening, and basswood holds firm. There is a free call for birch and beech. Mahogany and veneer trading shows the best record for a number of years and prices are well sustained.

PITTSBURGH

Hardwoods are right at the front of the procession. If anybody ever saw white oak in better demand than just now he will have to "show" his lumber friends. Wholesalers have almost stopped bidding on bill oak because it is so scarce. In furniture lumber and also stock for the vehicle and implement companies there is a mighty strong demand. The tendency is toward higher prices in all these stocks. Gum and cottonwood are going up and manufacturers through the middle west are increasing their orders with Pittsburgh agencies. Hardwood mills are very busy. Many of them complain of a scarcity of labor, while others have been handicapped somewhat by bad roads and a lack of teams. Yards are buying a fair supply but are pretty well stocked up now for winter. Trade with the factories and railroads is first class.

BALTIMORE

The advent of election day has brought no change in the hardwood trade, which retains its active character and continues to present a most encouraging aspect. While the advances that have taken place in the range of prices are not notably large, there has been a stiffening all along the line, with some decided marking up of the figures, and with the demand sufficiently brisk to take up the output of mills, so that there are practically no unsold stocks in the hands of the manufacturers. Of course, this is to be accepted with allowance for the maintenance of adequate selections and the seasoning of lumber. In many instances the time of seasoning is cut decidedly short and stocks are often sent out when not quite ready for the market.

The only item which has not responded to the general improvement is extra wide poplar of good quality, for which prices are materially below what such stocks, in the opinion of the millmen, should bring. Oak is holding its own in a highly gratifying way, and the current figures are so attractive that there is a general tendency on the part of the mills to increase their output. New plants are projected and old ones are being enlarged, but so far the production is being taken care of without the slightest difficulty. Chestnut is firm in all its divisions, even sound wormy stocks commanding prices that dispose the manufacturers to take orders. Ash is very steady, and much the same can be said with regard to all other woods in common use. The yards are buying with comparative freedom, finding now that the requirements of the trade are greater than at first seemed likely. For a time there was more or less deferring of orders until it became apparent that recessions of a material character could not be hoped for, since which time the orders have been coming in quite freely.

As a whole the export business is in satisfactory shape. The car shortage is causing trouble both in the domestic and in the export trade, but apart from this drawback and the re-

fusal of the railroads to issue through bills of lading there have been no unfavorable developments. Oak abroad is going up, and the expectation in the United Kingdom that when a certain price has been reached, domestic oak would enter the market to compete with American woods, has not been realized. The English oak, in fact, advanced with the rest, and the buyers abroad are now showing considerable eagerness to place orders. The whole export situation is viewed with satisfaction, and a continuance of such conditions is expected, although the question of ocean freight rates yet remains to be settled in part.

COLUMBUS

Hardwood trade in central Ohio is ruling strong in every particular. The demand both from dealers and factories remains good and, with stocks very light, prices are ruling strong. There are no indications of weakness in any direction and every change has been toward higher levels. The volume of business is good and since the weather has remained pleasant building operations are still active.

One of the best features is the demand for all grades and varieties. The lower grades are moving well, but not to the exclusion of the better grades. There is a good demand for all varieties and as a result there is no accumulation in any place. Dry stocks are generally scarce, and this presages high quotations for some time to come.

Factories engaged in making automobiles, vehicles, furniture and implements are in the market for stocks. The car shortage is bad and inclined to grow worse, and as a result efforts to stock up have not been very successful. There is no hope for an improvement in the car supply in this section, according to traffic managers of railroads.

Quartered oak is gaining in strength and the surplus stocks are being depleted. There is an extraordinary demand for plain oak, both red and white. Ash is stronger in every way. Poplar is gaining in strength and automobile factories are buying the wide sizes. Basswood is very strong. Chestnut is moving well and sound wormy is especially in good demand.

CINCINNATI

There is a very strong tone to the hardwood market and all stock is very scarce. All of the big mills are full up on orders and are accepting business only at top prices. Dealers who depend largely upon the smaller country mills for most of their stock find great difficulty in securing same as the extraordinary demand the country over for all kinds of hardwood lumber has made the buyers on the road in the producing territory so active that small producers have simply to sell to the buyer making the best offer. This competition has made prices of all items very strong.

The market in poplar is in a very satisfactory condition. Low-grade stock is in strong demand and an increased call is noted for high grades. No. 1 common and better has been somewhat of a disappointment this year and wide stock has done poorly, but dealers making a specialty of wide poplar have strong hopes of a better market. Prices on all grades are held up well and there is not much accumulation of the slower moving stock even in the face of a light demand.

Chestnut is going as well as anything at present; thick ash is in active demand and hard to find; plain oak is so strong as to need no particular mention and is the leader; quartered oak is doing nicely, better prices being obtained. Low-grade cottonwood is simply out of the market—dealers cannot secure any. There is an active demand for all grades of cypress and prices are being well maintained. No. 1 shop is

very strong in all thicknesses and the low-grade stock sells readily. Selects have a very good call.

The remarkably fine weather that has prevailed for the last few weeks has made possible the starting of much new work in the building field. Building contractors, with the object of supplying plenty of work for mechanics during the cold weather, have taken advantage of these conditions and are holding back on interior work in order to get new work enclosed.

There is much complaint among dealers of the light receipts due largely to the car shortage, which appears to be growing worse as shipments during the last week have been very light.

Cincinnati factory trade is very good, particularly the furniture trade and box factories.

TOLEDO

The hardwood situation has not changed greatly during the past month and there is certainly no weakening nor, so far as can be seen, is there any tendency in that direction. Dealers, however, are holding firmly to a hand-to-mouth policy, refusing to buy except where compelled to do so. It is contended by retailers that prices have reached the climax and cannot possibly go higher while there is a possibility of a break. At any rate they are willing to take that chance and in the meantime are supplying the trade from their yard stocks which have been holding up fairly well considering the drain that has been made upon them. Regardless of inclination, however, the wholesalers declare that it will be impossible for the retailers to hold out much beyond the first of the year and they are patiently awaiting that time.

Shipments continue very slow from all points, especially the South. In many instances orders placed months ago remain unfilled and there is no degree of certainty as to when orders placed now will be delivered.

Building in Toledo continues heavy. Never in the history of the city has there been so much building and especially so much building of an important character.

Furniture and vehicle factories are running normally for this season of the year and taken all in all hardwood dealers are finding but little to complain about.

INDIANAPOLIS

There has been no particular change in the local hardwood situation in the last two weeks. Prices are still steady and while a number of orders are coming in, deliveries are uncertain owing to car shortage. Most of the hardwood concerns report a large number of orders on hand which are unfilled on account of a lack of cars.

Lumbermen are doing their part toward relieving the car situation by loading and unloading cars as promptly as possible. It is thought that the car shortage will be relieved very materially within the next three weeks.

All grades of hardwoods appear to be in good demand. Factories using hardwoods have been busy for several months.

ST. LOUIS

The hardwood market is not showing as much activity as it did a couple of weeks ago. Still there is enough business being done to overtax the supply of salable items on the hardwood list. There is a steady demand for gum, cottonwood and ash, and lower grades of these items have nearly been cleaned up in the producing district. There is no particular change in the demand for poplar, and quarter-sawed red oak is going nicely.

Since the fall demand has started stocks of hardwoods in this market have gotten very low, and it is hard to fill all the orders offered for all of them, particularly plain oak. The car shortage has prevented much coming in to take the place of the items that have been shipped out and very little is expected to arrive in this market until there is a let up in the equipment needed for the movement of cotton.

Prices are firm on all items and an upward tendency prevails for the items most in demand. The call for cypress has fallen off somewhat but is still good. A big business has been done by the St. Louis dealers, and shipments continue to go out in good volume. The car shortage has greatly benefited the market. Cypress dealers are considering the matter of securing stocks as much as they are that of filling orders. The large yards, however, still have a good supply on hand and can fill nearly all orders coming to them. Prices are steady and firm.

LOUISVILLE

White oak is the "one best bet" at present, both plain and quarter-sawn varieties selling equally well. This is a noteworthy condition, this being the first time in over a year that quartered white oak is moving as briskly as plain. Manufacturers of quartered assert, how-

ever, that they are completely sold up, and some advances in price have been reported, although for the most part former quotations have ruled, the chief improvement being as to demand. Plain red oak is also selling briskly, though quartered red is not in particularly good demand. White ash is a big feature of the situation, and is moving well. Chestnut, cottonwood and gum are all in good call, while the better grades of hickory have been in surprisingly good demand.

NASHVILLE

The local hardwood lumber market continues unusually active. The demand is brisk for plain and quartered oak. Some of the dealers are compelled to decline orders for these lines. There is a generally good demand for other lines. The brisk business for several months has considerably reduced the stocks in the Nashville district, the total ordinarily running around 100,000,000 feet, but present stocks in this district would probably not go over 80,000,000 feet. Local hardwood flooring plants are operating at capacity, with a good demand. Some export shipments are mentioned. Box factories are also doing a good business.

MILWAUKEE

Despite the lateness of the season, the local hardwood business is holding up fairly well. Active building operations here and about the state, a brisk demand from farm implement concerns and box manufacturers, and a fair request from the sash and door plants and furniture factories are doing much to keep up trade.

Stocks at most points are still light and jobbers are complaining of the delay experienced in most instances in effecting deliveries on orders. The northern mills seem to be turning out only about enough to meet present requirements and the supply of dry stocks is exceedingly light. The car shortage is causing some trouble, especially in regard to southern shipments.

Maple is strong and prices for inch stuff have advanced one dollar during the past four weeks. Three-inch maple stocks are practically exhausted. Red birch is in especially brisk demand, while the furniture manufacturing concerns are calling for a considerable amount of No. 1 and No. 2 common. Stocks of No. 3 common birch are exhausted at most points. The interior finish plants and sash and door concerns are looking for all the unselected birch that they can get. Basswood prices are strong and low grade stuff is in good demand. In the southern woods plain and quartered oak leads the demand.

CADILLAC

Market conditions were never better in this vicinity than at the present time, taking hardwoods and hemlock as a whole. There are no large excess stocks of any kind. A year ago there was a surplus of maple flooring, but this has been taken up, first by the increased demand for maple flooring, second by the diversion of a considerable quantity of the flooring lumber to other purposes than into manufacture of flooring and the hemlock has been pretty well cleared up account excessive demands for both boards and piece stuff and because of the scarcity, prices have materially advanced in both woods.

LIVERPOOL

The market position is again exceedingly firm and almost everything at this port has taken a big bound upwards. Of course the larger portion of the rise in values is covered by the in-

creased freight charges which are now higher than has ever before been known here. The lucky holders of stock at this port are reaping a very rich harvest, especially those who have imported on the old basis of sea freight. However, there are not many so fortunate as to hold stock to any appreciable extent.

From all accounts before lumbermen, it is predicted that values will continue to advance firmly for at least another twelve months in the mahogany section where record prices were realized at the last sales. The market for hickory is again bare and some talk is heard of very high prices, contracts having been made for next year's shipments at prices which are higher than any sales during last year. Sound ash is in a similar position. Oak logs have sold well also. Although there have probably been more round oak logs imported this year than in any other year, there is not a log to be seen now. Birch logs have also been going well; in fact, there are very few prime logs left from last year's shipments. Oak planks to wagon specifications are snapped up as quickly as they arrive.

Prices of all the cheaper grades of stocks—saw gum, cottonwood and tupelo are also exceedingly firm. Wide stocks are very firm indeed and there is a keen demand for all classes of wide hardwoods. Cypress seems to be much in favor as a substitute for poplar stocks, which has now reached a price making it prohibitive for many trades.

GLASGOW

Business at present is conducted on fair lines, no special briskness in any particular line taking place. Though prices are well maintained, they should be higher to give some compensation to shippers.

Pitch pine continues firm, the upward tendency still being adhered to. Freight room is exceedingly difficult to obtain at present, so that little business is being done and that at prohibitive prices. C. I. F. values show no sign of weakening, as these will be held so as long as freights retain their present level. Everything at present points to values in spruce becoming still stronger. As importers know that prices are certain to advance still further, they are using the utmost caution and will not enter into engagements for delivery ahead. Any stock held at present is not sold except at greatly increased prices.

Several large cargoes of oak boards and planks have recently arrived from Baltimore. With the exception of one or two cars, the quality of these does not seem to be up to the usual standard. Prices realized, however, have been full, considering that the grading is down. It is not the least surprising that shippers have been lowering the grades to induce buyers to take up the lumber at lower prices. This is the direct result of the freight situation, but it is not desirable, even with the high freights prevailing, to lower the grades. It would be much better if shippers adhered strictly to the gradings and advanced prices accordingly. It is in the interest of shippers themselves and also agents here that greater care should be exercised in the selection of the planks.

A large quantity of southern oak logs are presently held in second hands and it seems that these are practically unsalable in spite of the good demand for oak logs. Thus it will be seen that the old remarks regarding southern oak logs are still applicable. Shippers are only storing up trouble for themselves when they persist in sending these logs forward. Had these logs been from West Virginia they would have been cut into dimensions ere this.

Packing case makers at present are brisk and furniture makers moderate, the difficulty in obtaining supplies making business difficult. Shipbuilding continues busy.

White Oak Flitches

Will pay cash f. o. b. your station for Quartered White Oak Flitches

CORRESPONDENCE SOLICITED

PUTNAM VENEER & LUMBER CO.
ROACHDALE, INDIANA.

LUMBER WANTED

4/4 & 5/4 No. 3 and 4 Com. Poplar.
4/4 No. 3 Basswood.
4/4 No. 3 Chestnut.

P. T. Baker & Son
1212 W. Liberty St. Cincinnati, O.

THREE STATES LUMBER CO.

Manufacturers of

SOUTHERN HARDWOODS
Cottonwood and Red Gum
SPECIALTIES

Main Office, Memphis, Tenn.

BLUESTONE LAND & LUMBER COMPANY

MANUFACTURERS

West Virginia Hardwoods

SOFT WHITE PINE
OAK POPLAR
CHESTNUT HEMLOCK

BAND SAWED STOCK

Complete Planing Mill Facilities

RIDGWAY, PENNSYLVANIA

THIS IS OUR RECORD

In Business	- - - - -	7½ Years
Losses Paid	- - - - -	\$1,000,000
Savings to Subscribers	- - - - -	500,000
Savings Returned to Subscribers	- - - - -	200,000
Quick Assets Belonging to Subscribers	-	650,000

More Cash Assets to each \$100 of Outstanding Liability than the Largest Stock Companies

Entire Interest Earnings Paid to Subscribers

Experience has demonstrated that from one-third to one-half of the cost of their insurance can be saved to the LUMBERMEN by carrying ALLIANCE POLICIES. Give us the opportunity to make these substantial savings for YOU.

Lumbermen's Underwriting Alliance

U. S. EPPERSON & COMPANY, ATTY. & MGR.

R. A. Long Bldg.

Kansas City, Mo.

Advertisers' Directory

NORTHERN HARDWOODS.

American Lumber & Mfg. Co.	17
Arpin Hardwood Lumber Co.	66
Beecher & Barr.	16
Bradley, E. C. Lumber Co.	15
Brown Brothers Lumber Company.	66
Buffalo Hardwood Lumber Co.	67
Coale, Thos. E., Lumber Company.	16
Cobbs & Mitchell, Inc.	3
Craig, W. P., Lumber Co.	16
Curl, Daniel B.	16
Darling, Chas. & Co.	53
Elias G. & Bro.	67
Estabrook-Skeele Lumber Co.	4
Flanner-Steger Land & Lumber Co.	4
Forman Company, Thomas	64
Goodyear, C. A., Lumber Co.	66
Hadentine Lumber Company, Inc.	62
Hanson-Turner Company.	14
Heyser, W. E. Lumber Co.	16
Holyoke, Chas.	1
Holloway Hardwood Lumber Co.	1
Jones Hardwood Company.	16
Kent, J. S., Company.	17
Klann, E. H.	53
Kneeland-Bigelow Company, The.	3
Litchfield, William E.	16
Long-Knight Lumber Company.	1
MacLaren, D. B., Lumber Company.	17
McIlvain, J. Gibson, & Co.	2
McLean, Hugh, Lumber Co.	53
McParland Hardwood Lumber Co.	67
Miller, Anthony.	8
Mitchell Bros. Company	15
Mowbray & Robinson.	15
Oelhafen Lumber Company.	66
Osgood & Richardson.	53
Palmer & Parker Co.	17
Parry, Chas. K. & Co.	16
Perrine-Armstrong Company.	15
Salling-Hanson Company.	64
Sawyer-Goodman Company.	6
Schultz, Holloway Co.	4
Smith, Fred D.	53
Standard Hardwood Lumber Co.	67
Stearns Salt & Lumber Company.	69
Stephenson, L. Company, The.	64
Stimson, J. V., & Co.	15
Sullivan, T. & Co.	67
Tegge Lumber Co.	66
Vinke, J. & J.	64
VonPlaten Lumber Co.	64
Webster Lumber Co., George.	17
White, Wm. H. Co.	68
Wiggin, H. D.	17
Williams, Ichabod T. & Sons.	16
Willson Bros. Lumber Company.	16
Wisconsin Land & Lumber Co.	64
Wistar, Underhill & Nixon.	17
Wood-Mosaic Company.	17
Yeager, Orson E.	67
Young, D. & Co.	3

SOUTHERN HARDWOODS.

American Lumber & Mfg. Co.	17
Anderson-Tully Company	9
Atlantic Lumber Company	67
Baker-Matthews Mfg. Co.	65
Baker, P. T. & Son.	49
Bennett & Witte	15
Bluestone Land & Lumber Co.	49
Boice Lumber Company.	10
Booker-Cecil Company.	11
Bradley, E. C., Lumber Co.	15
Brown, W. P., & Sons Lumber Co.	11
Buffalo Hardwood Lumber Co.	67
Carrier Lumber & Mfg. Co.	18
Cherokee Lumber Co.	7
Coale, Thos. E., Lumber Company.	16
Curl, Daniel B.	16
Darling, Chas. E. & Co.	53
Davis, Edward L., Lumber Company	11
Dempsey, W. W.	15
Duhlmeier Brothers	14
Elias G. & Bro.	67
Estabrook-Skeele Lumber Co.	4
Farrin, M. B., Lumber Company.	15
Faust Bros. Lumber Co.	18
Flanner-Steger Land & Lumber Co.	4
Hadentine Lumber Company, Inc.	17
Hamilton, J. V.	12
Heyser, W. E., Lumber Company.	14
Hill Brothers Tie & Lumber Co.	10
Himmelberger-Harrison Lumber Co.	65
Hitt, H. H., Lumber Company.	65
Holloway Hardwood Lumber Co.	1
Huddleston-Marsh Lumber Co.	4
Kent, J. S., Company.	17
Kentucky Lumber Co.	14
Keys-Walker Lumber Co.	6
Kimball & Kopcke.	53
Klann, E. H.	53
Lamb-Fish Lumber Co.	8
Litchfield, William E.	16
Little River Lumber Company	18
Logan-Maphet Lumber Co.	6
Long-Knight Lumber Company.	1
Louisiana Long Leaf Lumber Co.	65
Louisville Point Lumber Company.	11
Love, Boyd & Co.	7
Maley, Thompson & Moffett Co.	13
Maphet & Shea Lumber Company.	6
McIlvain, J. Gibson, & Co.	2
McLean, Hugh, Lumber Co.	67
McParland Hardwood Lumber Co.	53
Miller, Anthony.	67
Mowbray & Robinson.	15
Norman Lumber Company.	11
Ohio River Saw Mill Company.	11
Osgood & Richardson.	53
Paepoke-Leicht Lumber Company.	8
Parry, Chas. K. & Co.	16
Peytona Lumber Company, Inc.	10
Radina, L. W., & Co.	14
Ransom, J. B., & Co.	7
Ritter, W. M., Lumber Company.	68
Russe & Burgess, Inc.	18
Salt Lick Lumber Company.	65
Schultz, Holloway Co.	4

Slaymaker, S. E. & Co.	1
Smith, Fred D.	53
Standard Hardwood Lumber Co.	67
Stewart, I. N., & Brother.	67
Stimson, J. V., & Co.	15
Sullivan, T. & Co.	67

Tennessee Hardwood Lumber Co.	7
Three States Lumber Company.	49

Vestal Lumber & Manufacturing Co.	6
Vinke, J. & J.	64
Von Platen Lumber Co.	64

Webster Lumber Co., George.	17
West Virginia Timber Company.	10
Whitmer, Wm. & Sons.	16
Wiggin, H. D.	17
Williams, Ichabod T. & Sons.	16
Willson Bros. Lumber Company.	16
Wistar, Underhill & Nixon.	17
Wood-Mosaic Company.	17
Wood, R. E., Lumber Company.	17

Yeager, Orson E.	67
------------------	----

POPLAR.

Anderson-Tully Company.	9
Atlantic Lumber Company	67
Baker, P. T. & Son.	49
Farrin, M. B., Lumber Company.	15
Faust Bros. Lumber Company.	18
Kentucky Lumber Company.	14
Keys-Walker Lumber Company.	6
Logan-Maphet Lumber Co.	6
Maphet & Shea Lumber Company.	6
Peytona Lumber Company, Inc.	10
Radina, L. W. & Co.	14
Ritter, W. M., Lumber Company.	68
Vansant, Kitchen & Co.	68
West Virginia Timber Company.	10
Wood, R. E., Lumber Company.	17
Yellow Poplar Lumber Company.	68

VENEERS AND PANELS.

Acme Veneer & Lumber Company.	13
Adams & Raymond Veneer Co.	12
Annapoe Veneer & Seating Co.	62
Astoria Veneer Mills & Dock Co.	61
Cadillac Veneer Company.	60
Central Veneer Company.	60
Gorham Brothers Company.	61
Hanson-Turner Company.	62
Hoffman Bros. Company.	62
Huddleston-Marsh Lumber Co.	4
Jarrell, B. C. & Co.	60
Kentucky Veneer Works.	60
Kiel Wooden Ware Company.	62
Knoxville Veneer Company.	6
Knoxville Veneer Mills.	11
Maley, Thompson & Moffett Co.	13
Mengel, C. C. & Bro. Company.	6
Ohio Veneer Company.	13
Penrod Walnut & Veneer Co.	60
Rayner, J.	63
Radford-Portsmouth Veneer Co.	63
Sheppard Veneer Company.	60
Southern Veneer Manufacturing Company.	63
Underwood Veneer Company.	63
Veneer Manufacturers' Company.	60
Walker Veneer & Panel Co.	53
Willey, C. L.	1
Williams, Ichabod T. & Sons.	62
Wisconsin Seating Company.	17
Wood-Mosaic Company.	65

MAHOGANY, WALNUT, ETC.

Acme Veneer & Lumber Company.	13
Astoria Veneer Mills & Dock Co.	61
Duhlmeier Brothers.	12
Hamilton, J. V.	7
Huddleston-Marsh Lumber Co.	68
Maley, Thompson & Moffett Co.	18
Mengel, C. C. & Bro. Company.	11
Palmer & Parker Co.	17
Penrod Walnut & Veneer Co.	60
Purcell, Frank	65

Rayner, J.	4
Willey, C. L.	1
Williams, Ichabod T. & Sons.	1

HARDWOOD FLOORING.

Arpin Hardwood Lumber Co.	66
Beecher & Barr.	16
Carrier Lumber & Mfg. Co.	18
Cobbs & Mitchell, Inc.	3
Eastman, S. L., Flooring Co.	64
Farrin, M. B. Lumber Company.	15
Forman, Thos., Company.	64
Kerry & Hanson Flooring Co.	64
Louisiana Long Leaf Lumber Co.	65
Mitchell Bros. Company.	3
Robbins Lumber Co.	66
Salt Lick Lumber Company.	65
Stearns Salt & Lumber Company.	9
Stephenson, L. Company, The.	64
Webster Lumber Co., George.	17
White, Wm. H. Co.	68
Wilce, T. Company, The.	4
Wisconsin Land & Lumber Co.	64
Young, W. D., & Co.	3

WOODWORKING MACHINERY.

Cadillac Machine Co.	59
Defiance Machine Works, The.	12
Hanchett Swage Works.	12
Linderman Machine Co., The.	12
Mershon, W. B., & Co.	12
Phoenix Manufacturing Co.	58
Saranac Machine Company.	58
Smith, H. B., Machine Co.	57
Steinmetz, C. M.	16
Westinghouse Electric & Mfg. Co.	16

LOGGING MACHINERY.

Baldwin Locomotive Wks.	59
Clyde Iron Works.	55
Lidgerwood Mfg. Co.	16
Russel Wheel & Foundry Co.	59

DRY KILNS AND BLOWERS.

Grand Rapids Veneer Works.	58
Phila. Textile Mch. Co.	1

SAWS, KNIVES AND SUPPLIES.

Atkins, E. C., & Co.	56
Simonds Mfg. Co.	57

LUMBER INSURANCE.

Central Manufacturers' Mut. Ins. Co.	1
Epperson, U. S.	50
Indiana Lumbermen's Mut. Ins. Co.	1
Lumber Mutual Fire Insurance Co.	1
Lumbermen's Mutual Ins. Co.	1
Lumbermen's Underwriting Alliance	50
Lumber Underwriters.	18
Pennsylvania Lumbermen's Mutual Fire Ins. Co.	1
Rankin, Harry & Co.	1

TIMBER LANDS.

Lacey, James D., & Co.	2
Spry, John C.	12

MISCELLANEOUS.

American Freight Audit & Storage Company.	18
Astoria Veneer Mills & Dock Co.	63
Childs, S. D. & Co.	53
Gerlach, The Peter, Company.	53
Lumbermen's Credit Association.	12
Mechanical Rubber Company.	58
Tamm's Silica Company.	53
Wausau Advancement Association.	53
Westinghouse Electric & Mfg. Co.	16

CLASSIFIED ADVERTISEMENTS

Advertisements will be inserted in this section at the following rates:

For one insertion.....20c a line
For two insertions.....35c a line
For three insertions.....50c a line
For four insertions.....60c a line

Eight words of ordinary length make one line. Heading counts as two lines. No display except the headings can be admitted.

Remittances to accompany the order. No extra charges for copies of paper containing the advertisement.

EMPLOYEES WANTED

WANTED

A practical buyer and inspector for wagon stock with headquarters at Memphis, Tenn. Address "BOX 96," care HARDWOOD RECORD.

WANTED

Salesmen on our New Census publications. Splendid opportunity. Men making \$50 to \$75 per week. RAND, McNALLY & CO., Dept. B., Chicago, Ill.

ASSISTANT IN SALES DEPARTMENT

Large Chicago jobbing house has opening for young man as assistant in sales department. Some knowledge of lumber, office work and stenography desirable. Moderate wages to start, but good opportunity for alert worker to advance. Address, stating age, experience, references and wages expected, "BOX 112," care HARDWOOD RECORD.

WANTED

Thoroughly competent veneer slicer operator. In replying give age, qualifications, experience, size plants have operated, and complete references. Address "BOX 111," care HARDWOOD RECORD.

IF YOU WANT

competent employees in any department of the hardwood business, there is no better way of securing them than by employing the Classified Advertisements section of HARDWOOD RECORD, which reaches woodsmen, sawmill men and salesmen in all parts of the country.

EMPLOYMENT WANTED

WANTED—EMPLOYMENT

When you want a salesman for New York state territory, write us. We can supply you with a good man. EMPIRE STATE ASSOCIATION of Wholesale Lumber & Sash & Door Salesmen. Chas. Johnson, Sec'y, 96 Kirkland Rd., Rochester, N. Y.

WAGON STOCK WANTED

WANTED—WAGON STOCK

Wagon tongues, reaches, bolsters, hickory dimension stock for buggy and wagon work. Inspection at mill points.

J. A. BROWNE & CO., INC., North Manchester, Ind.

I AM IN THE MARKET FOR

75 to 100 cars of oak poles, bolsters, sand boards, eveners, and reaches; and hickory and maple axles. Will inspect at shipping point, and pay cash. E. B. BROWN, 372 Bayne St., Buffalo, N. Y.

TIMBER ESTIMATING

TIMBER ESTIMATES

Estimating Southern timber a specialty. Maps, detailed reports as to stand, quality and logging conditions. Have a few high-class properties for sale. Can furnish best references.

THOS. J. McDONALD,
East Tenn. Natl. Bank Bldg.,
Knoxville, Tenn.

LOGS WANTED

WANTED—BLACK WALNUT LOGS

500 cars good black walnut logs, 10" and up in diameter, 6 ft. and up long. Will inspect at shipping point and pay cash.

GEO. W. HARTZELL, Dayton, Ohio.

WANTED—HARDWOOD LOGS

200,000 ft. 28" and up White Oak logs.
200,000 ft. 12" and up Walnut logs.
50,000 ft. 12" and up Cherry logs.
C. L. WILLEY, 2558 S. Robey St., Chicago.

TIMBER LANDS FOR SALE

TIMBER LANDS.

Virgin Oak, Poplar and Chestnut. 3,600 acres. Clay County, North Carolina. Now owned by us. Titles perfect. Other timber adjacent. 10 miles from a railroad. Near Murphy branch of Southern. Now operating at Heidelberg, Kentucky, and do not need above tract. A low price for a quick sale. Please write us quickly. THOMAS FORMAN COMPANY, Detroit, Mich.

ARE YOU INTERESTED IN GUM and Red Oak?

I own in fee simple two small and carefully selected tracks of high-class gum and red oak stumpage. Will sell at price to make the buyer good money either as an investment or as an operating proposition.

Will deal with principals only. Address in confidence, "BOX 22," care HARDWOOD RECORD.

FOR SALE—2,400 ACRES

in West Carroll Parish, Louisiana—cruises 5,000 ft. Oak, largely White, per acre. In addition, has Gum and other Hardwoods, easily logged to nearby railroad station. Fine proposition. Additional timber can be procured. Address

H. H. HITT LUMBER CO., Decatur, Ala.

FOR SALE

15,000 acres virgin short leaf yellow pine, Louisiana, one body on railroad; will cut eighty million feet, and sixty million feet hardwood, one of the best tracts in State; price \$16.50 per acre; also 19,000-acre hardwood tract, price \$14.00 per acre. KENDALL & WILSON, Palestine, Texas.

LUMBER FOR SALE

THICK POPLAR FOR SALE

6 to 9 months on sticks, 2½ and 4" Poplar, common and better. Write for prices. C. M. CRIM & SON, Salem, Ind.

LUMBER FOR SALE.

4 cars 4 4.1sts and 2nds bone dry Sycamore, standard widths and lengths.
2 cars 4/4x13" and up dry plain 1sts and 2nds Red Oak, 50% 14 and 16 feet.
5 cars 4/4 No. 1 Com. Red Gum, bone dry.
W. D. REEVES LBR. CO., Helena, Ark.

OAK, POPLAR, ASH

and all other hardwoods, in all grades and thicknesses, can be readily sold if advertised in the Wanted and For Sale section of HARDWOOD RECORD. If you have a large stock you want to sell try a few lines in this department and see what a lot of inquiries they will bring you.

FOR SALE—BAY POPLAR

At our Ayden Mill, freight rate to
Norfolk, Va.....8c
Baltimore.....15c
Philadelphia.....16c
New York City.....20c
Boston.....23c

We offer 400 M feet 1x6" and wider Bay Poplar, thoroughly bone dry and straight, good widths and lengths, beautiful stock, piled for 1sts and 2nds, but will likely down grade in shipping about 20% No. 1 common. This stock is cut heavy and most of it would dress two sides 1" thick. For quick shipment will quote special prices.

AMERICAN LBR. & MFG. CO., Pittsburgh, Pa.

RAILWAY EQUIPMENT FOR SALE

FOR SALE

A 50-ton Shay locomotive, standard gauge, new in June, 1909—2,400 gallon tank. Full details furnished.

THE CADILLAC HANDLE CO., Cadillac, Mich.

DIMENSION STOCK WANTED

WANTED—DIMENSION STOCK

Oak, plain and quartered; boards and squares. Also dogwood and persimmon.

INDIANA QUARTERED OAK CO.,
7 East 42d St., New York, N. Y.

GLUED-UP POPLAR OR BASSWOOD

Dimension Stock to finish 7/8"x19"x36" in car-load lots. Will furnish specifications upon request. ARTHUR BAILEY & CO., No. 1 Madison Ave., New York, N. Y.

WANTED—SMALL DIMENSIONS

We are always in the market for short dimensions in Oak Squares; also 3/4, 4/4, 5/4 and 6/4 Quartered White Oak 16 to 24" long; also Plain Oak 1x2 and wider, 12 to 54" long. We also handle the standard length hardwoods. What have you to offer for cash? Best of bank reference.

FURNITURE & CHAIR STOCK Co.,
5150 Chestnut St., Philadelphia, Pa.

LUMBER WANTED**BUYERS OF HARDWOODS.**

Do you want to get in touch with the best buyers of hardwood lumber? We have a list, showing the annual requirements in lumber, dimension stock and veneers and panels of consumers of those materials throughout the United States and Canada. The service is free to advertisers in the RECORD. It will interest you. Write us for further information about our "Selling Lumber by Mail System."

HARDWOOD RECORD, Ellsworth Bldg.,
Chicago.

WANTED

Five cars 1" No. 3 common chestnut.
DUHLMEIER BROTHERS, Cincinnati, O.

BUSINESS OPPORTUNITIES**FOR SALE**

One band mill, and about one hundred million feet of hardwood stumpage. Very easy terms. Address owner, P. O. BOX "K," Pensacola, Fla.

EXCELLENT OPPORTUNITY

for man to go in manufacturing business. Have well-equipped hardwood factory suitable for making spokes and vehicle stock. Healthy location in town six thousand, on two rivers and two railroads. Address

"BOX 72," care HARDWOOD RECORD.

FOR SALE

A well-equipped Basket and Veneer Plant, well located for timber, shipping facilities and for the market of its products. Factory statement based on actual results. Reason for selling and other information cheerfully given on application. Address "L. V.," care HARDWOOD RECORD.

FOR SALE

Ash Handle Factory, located in a northern Indiana town with two good railroads. Good timber location. Factory running and making money. 100 H. P. boiler and engine. Elevated iron supply tank. Hot water pump. New Philip Smith 8 ft. bolter, rip table, equalizer; 1 No. 10 Ober automatic lathe; 1 St. Mary's center lathe, pulleys, belting, saws, tools, etc., sawmill. Steel store shed 20x80. Good reasons for wanting to sell. Present owners would retain interest if desired. Address

"BOX 109," care HARDWOOD RECORD.

FULLY EQUIPPED SAWMILL

with dry kiln and planing mill, 40,000 feet capacity. Forty or fifty million feet of long leaf yellow pine and cypress timber. Now operating. Good reasons for selling. Address

DEAN REALTY & IMPROVEMENT CO.,
Waycross, Ga.

WOOD ALCOHOL PLANT

We have a very desirable location and ample supply of raw material for a wood alcohol plant. Will be glad to negotiate with anyone interested in the establishment of such an industry.

GEO. WEBSTER LBR. CO.,
21 Besse Place, Springfield, Mass.

MACHINERY FOR SALE**FOR SALE**

Complete Band Mill located at Memphis, Tenn. For particulars address
ISAAC WRIGHT, Memphis, Tenn.

MISCELLANEOUS**BAUGHMAN'S BUYER AND SELLER**

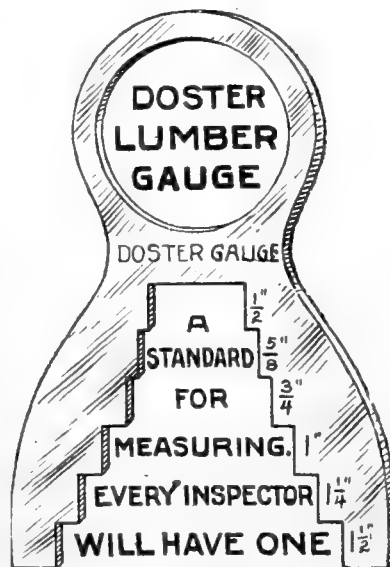
The twelfth edition of the handy book for lumbermen just out, revised, improved. See the new side tables, the metric system, tapering timber, to figure narrow flooring, moulding, box work, etc. Five sections, each indexed and a separate work. Every page worth the price of the book. The book that talks to lumbermen. Not millions, but more than seventy-five thousand copies have been sold to lumbermen. Bound in red flexible cover, \$2.50 per copy prepaid. Orders filled day received. Address
H. R. A. BAUGHMAN, Indianapolis, Ind.

WANTED—HARDWOOD LUMBERMEN—

to try the Gibson Tally Book. The three-throw aluminum tally ticket cover accommodates any form of ticket desired. The use of the special triplicate tally ticket supplied, printed on waterproof paper with carbon backs makes tallies unalterable. For durability, convenience, accuracy and for systematizing the inspection of lumber the Gibson tally method can't be beat.

Special forms of tally tickets mailed on application. Covers sold on approval to responsible concerns.

HARDWOOD RECORD,
537 So. Dearborn St., Chicago.



For sale by HARDWOOD RECORD,
537 S. Dearborn St., Chicago, Ill.
50 CENTS EACH.

COUNTERFEIT CHECKS

are frequent except where our

Two Piece Geometrical Barter Coin is in use, then imitation isn't possible. Sample if you ask for it.

S. D. CHILDS & CO.,
Chicago

We also make Time Checks, Stencils and Log Hammers.

**CHICAGO****E. H. KLANN**

Cottonwood, Gum, Oak, Ash, Cypress, Yellow Pine, Dimension Stock

819 FISHER BLDG.

CENT. 3825

Osgood & Richardson
935 Peoples Gas Bldg.

NORTHERN AND SOUTHERN
HARDWOODS

Chicago Agents: LAMB-FISH LUMBER CO.

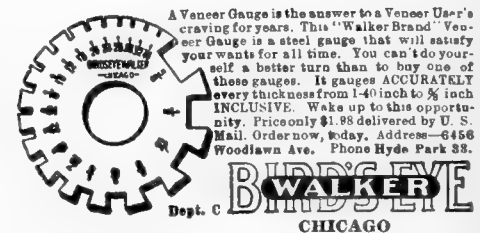
Telephone Canal 1688

CHAS. DARLING & CO.
HARDWOOD LUMBER

22nd Street and Center Avenue
CHICAGO

McParland Hardwood
Lumber Co. 2204 S. Laflin St.
HARDWOODS**FRED D. SMITH**
HARDWOOD LUMBER

1337-1343 North Branch St. CHICAGO



99% PURE
SILICA
OR SILEX FOR WOOD FILLERS
TAMMS SILICA CO., 19 So. 5th Ave., Chicago

Gerlach Modern Machines

Produce the Cheapest and Best

COOPERAGE STOCK
and **BOX SHOOKS**

Circular, Band and Cylinder Saws
SAW AND LOG TOOLS

THE PETER GERLACH CO., Cleveland, 6th City, U.S.A.

This is Form Y

Y G. M. CC. -- PAT. JAN. 3, 1907

Elkmont Contracting & Supply Co.
Elkmont, Tenn.

Camp _____ 191

DIA.	8	10	12	14	16		DIA.	8	10	12	14	16		TOTAL
8							37							
9							38							
10							39							
11							40							
12							41							
13							42							
14							43							
15							44							
16							45							
17							46							
18							47							
19							48							
20							49							
21							50							
22							51							
23							52							
24							53							
25							54							
26							55							
27							56							
28														
29														
30														
31														
32														
33														
34														
35														
36														
Total														
TOTAL NO. LOGS & AM'T. IN FEET														
CARS — AVERAGE PER CAR														

REMARKS:

SCALER

Of Single Duplicate or Tripli-
cate Log Tally Ticket (with-
out Loose Carbon Sheets)
used in the

Gibson Aluminum Tally Book Covers

MANUFACTURED BY
HARDWOOD RECORD
537 S. Dearborn Street
CHICAGO

Let us send you catalogue and
price list of scores of forms of
lumber, flooring and log tally
tickets.

The Gibson Tally Book System
has more than 2,500 users.

"CLYDE-GRADE Than which there is None better."

It doesn't seem possible to build Logging Machinery of greater economy and efficiency than that described and illustrated in this new catalog of ours:- but of course if it ever becomes possible, we will build it.



Our **FACTORY**
at **DULUTH**

Ask for
CATALOG
No. 1
THE NEW ONE.



CLYDE IRON WORKS

Manufacturers at DULUTH, Minnesota, U.S.A. of
CLYDE-GRADE Logging and Hoisting Machinery.



Are your saws standing up to their work as they should?
Are you getting the most service—at the least expense?



MANAGER—"Riley, our records show a decreased cost in production last month. How do you account for it?"

SUPERINTENDENT—"It's those **SILVER STEEL SAWS**, Mr. Bossman. We only change Saws twice a day now as against three times with those other Saws. Just touch them up on the automatic and they're ready for another run. I had no idea how much difference this would make in our output."

MANAGER—"Better put in a requisition for **SILVER STEEL BAND SAWS** for the 10" Mill and Re-Saw right away. We can't make money any easier than that."

Not "Fairy Tales," but facts, gentlemen. These are actual experiences of the biggest mills everywhere. You cannot afford *not* to use

ATKINS SILVER STEEL SAWS

SILVER STEEL costs more than any other Saw Steel and it's worth every cent that it costs. It's almost positive insurance against cracks because it's so tough and then the teeth hold their points and the blades their teeth and tension. Why not become curious and make us prove these statements?

Order from your usual source. Just specify **ATKINS SILVER STEEL**. Or write to the nearest address below—we'll see that you get them to the best advantage.

HAND SAWS—CIRCULAR SAWS—CROSS CUTS—GANG SAWS—A Perfect Saw for Every Purpose. MACHINE KNIVES General Agents Covel Filing Room Machinery.

E. C. ATKINS & CO., Inc., THE SILVER STEEL SAW PEOPLE **Home Office and Factory, INDIANAPOLIS, IND.**

Branches: Atlanta, Chicago, Memphis, Minneapolis, New Orleans, New York City, Portland, San Francisco, Seattle, Vancouver, B. C., Sydney, N. S. W.
Canadian Factory—Hamilton, Ont. Machine Knife Factory—Lancaster, N. Y.

Saw Repairs

IF there is any Saw Repair work that you want done to get things in final shape for winter, ship your saws to a Simonds Factory just as soon as you can and we will do the work right.

Tags for shipping furnished on request.

SIMONDS MANUFACTURING COMPANY

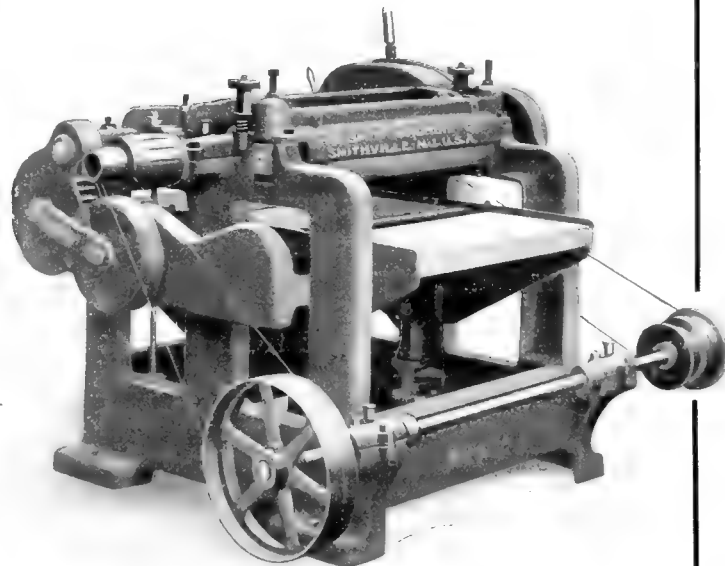
Fitchburg, Mass.
New York City
Portland, Ore.

Vancouver, B. C.
Chicago, Ill.
New Orleans, La.
San Francisco, Cal.

Montreal, Que.
Seattle, Wash.
St. John, N. B.

SMITH
OF SMITHVILLE
LEVEL

A New Surface Planer



REAR-END NO. 61-A SURFACE PLANER

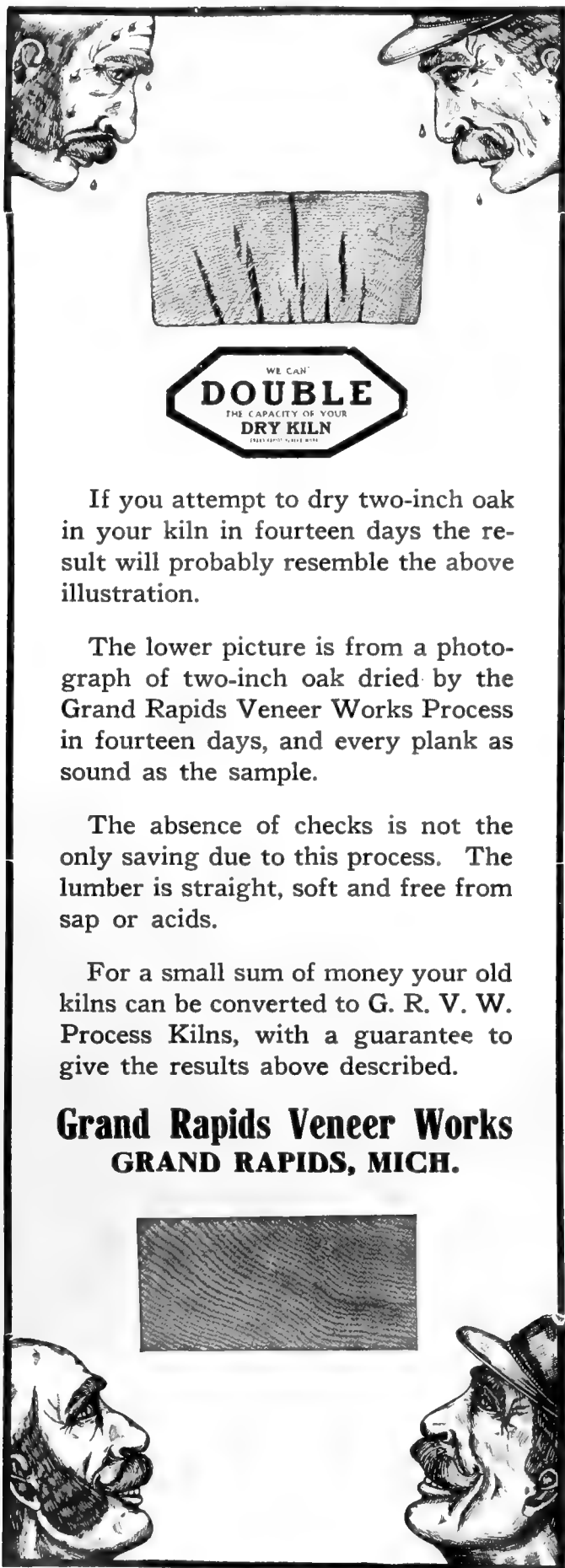
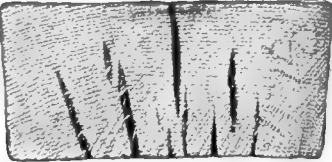
The halftone represents a New Single Surfacers which is made in two sizes, to plane 24" x 8" and 27" x 8". The machine is regular, as per cut, but it can be fitted with **Sectional Feed Rolls** and **Flexible Chip-breaker** for fine work, or equipped with **Round 4-Knife Head** for speed.

Send for Special Circular

H. B. Smith Machine Co.

Smithville, N. J., U. S. A.

New York Chicago Atlanta San Francisco

WE CAN'T
DOUBLE
THE CAPACITY OF YOUR
DRY KILN
EXPERIENCE MAKES THE DIFFERENCE

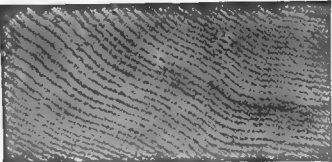
If you attempt to dry two-inch oak in your kiln in fourteen days the result will probably resemble the above illustration.

The lower picture is from a photograph of two-inch oak dried by the Grand Rapids Veneer Works Process in fourteen days, and every plank as sound as the sample.

The absence of checks is not the only saving due to this process. The lumber is straight, soft and free from sap or acids.

For a small sum of money your old kilns can be converted to G. R. V. W. Process Kilns, with a guarantee to give the results above described.

Grand Rapids Veneer Works
GRAND RAPIDS, MICH.



Corrugated Joint Fasteners

Can be quickly and cheaply driven with

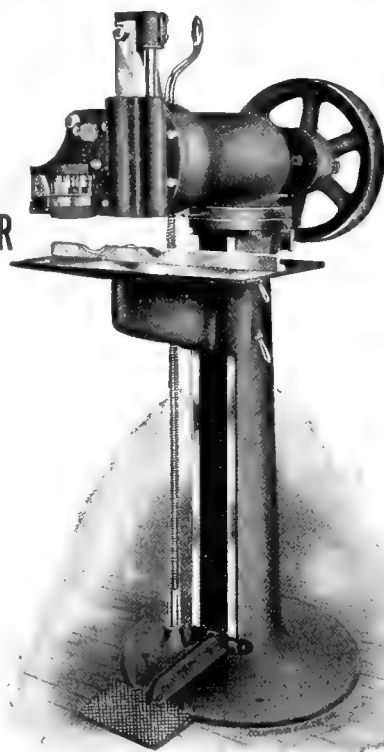
"ADVANCE" CORRUGATED JOINT FASTENER MACHINE

Made in Different
Types to Meet
All Conditions

Specially suitable for
manufacturers of
sash, doors, blinds,
screens, coffins,
furniture, plumbers'
wood-work, porch
columns, boxes,
refrigerators, etc.

Write for bulletins
and prices.

Manufactured only
by



Saranac Machine Co., St. Joseph, Michigan

ELEPHANT RUBBER BELTING

AIR DRILL AND AIR TOOL

HOSE

STEAM
WATER
SUCTION

EXTRA QUALITY

Recommended for hard service
and guaranteed to do the work

SELLING AGENTS

CRANE COMPANY - ALL BRANCHES
STANDARD EQUIPMENT CO., MOBILE, ALA
ALBANY MILL SUPPLY CO., ALBANY, GA.

THE MECHANICAL RUBBER COMPANY

(Chicago Rubber Works)

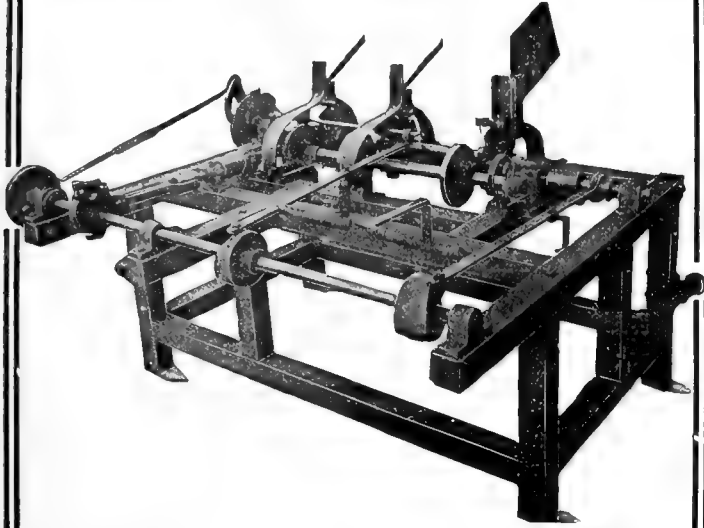
307 W. Randolph Street,
ESTABLISHED 1882

CHICAGO



Broom Handle

CHUCKING AND BORING MACHINE



It rounds end of handle and bores small hole in other end automatically at same time. Capacity, 45,000 handles in ten hours. All the operator has to do is to keep the handles fed to the machine. Used by the largest producers. Write for details and price.

CADILLAC MACHINE CO.

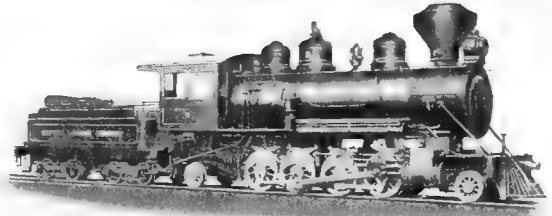
Makers of Handle Makers Tools. CADILLAC, MICHIGAN

THE BALDWIN LOCOMOTIVE WORKS

PHILADELPHIA, PA., U. S. A.

Manufacturers of

LOGGING LOCOMOTIVES



Locomotives with a radial truck at each end, and separate tenders, are well adapted to logging service where long hauls must be made. These engines ride well on rough track, and can be run backwards into sharp curves and switches without danger of derailment.

BRANCH OFFICES

NEW YORK, N. Y., Hudson Terminal. CHICAGO, Ill., Railway Exchange
ST. LOUIS, Mo., Security Building. PORTLAND, Ore., Spalding Bldg

Cable Address:—"Baldwin, Philadelphia."



THE RUSSEL COMBINED SKIDDER AND LOADER IN OPERATION

Russel Logging Cars are built to stand severe service, of any capacity desired or to suit any length of log.

Logging Economy will interest you

The most convincing proof of any machine's efficiency, next to a personal trial, is the expression of those who have used them.

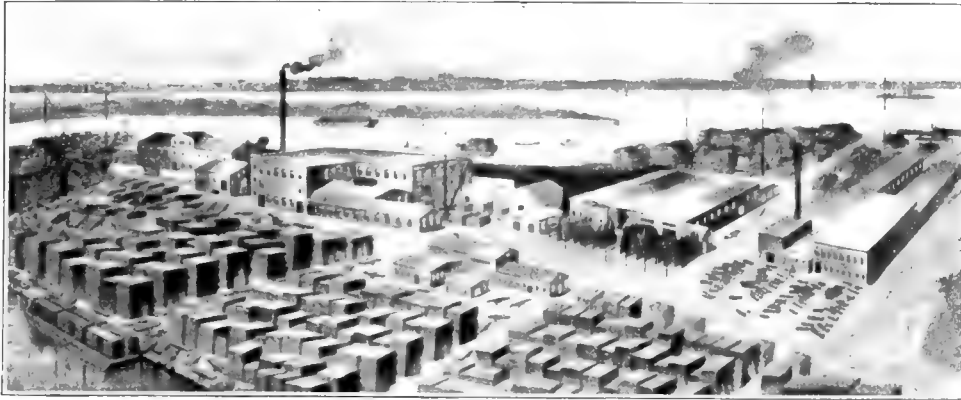
We shall be pleased to furnish you with the proofs or the names of the operators who will be glad to show you the machines in operation.

The Russel Combined Skidder and Loader has demonstrated itself to be superior in design and construction. The great decrease in cost and increased efficiency of logging is bound to appeal to the operators.

Russel Wheel & Foundry Co., Detroit, Mich.

VENEERS AND PANELS

Custom Mill Work, Storage, Inspection ON Foreign Fancy Woods, Mahogany, Cedar, Circassian



Mills, Log and Lumber Storage Yards, Astoria Veneer Mills & Dock Company

We receive the logs, store or warehouse them, manufacture them into lumber, cut or saw veneers, pile and store the product, and ship via any railroad. Also furnish inspection returns on logs or lumber. Can furnish accommodations and economies which it is impossible to secure elsewhere. While we do not buy or sell for our own account, we always have on our yards parcels of plain and figured African, Mexican and Cuban Mahogany, Circassian Walnut and Cedar logs, placed here for sale by direct foreign shippers, from which advantageous purchases can be made.

Astoria Veneer Mills & Dock Co.

Long Island City, New York

Veneered Panels

It is obvious that a veneer panel making plant, equipped with every facility to produce in large quantity panels of every description, can produce panels at far less cost than any individual manufacturer can make them for his own use.

This is the important fact we want to impress upon you. We can supply the panels you use in two, three and five-ply quarter-sawed oak, quarter-sliced oak, figured mahogany, plain mahogany, red birch, plain oak, yellow pine, gum, basswood, ash, maple and elm at less cost than you can produce them.

Drop a line to us and mention your panel needs and we will submit samples and quote prices that will settle the question.

Veneer Panel making is our specialty, and we claim that the panels we make are cheaper in the long run for they

Will not come
to pieces
after they
are in the
furniture

Do you see the point?

The Gorham Brothers Company

:: :: :: :: :: **MT. PLEASANT, MICH.** :: :: :: :: ::

VENEERS AND PANELS

Ahnapee Veneer & Seating Co.

HOME OFFICE, FACTORY AND VENEER MILL, ALGOMA, WIS.
VENEER AND SAWMILL, BIRCHWOOD, WIS.

We manufacture at our Birchwood plant single ply veneers of all native northern woods and deliver stock that is in shape to glue.

From our Algoma factory, where we have specialized for twenty years, we produce panels of all sizes, flat or bent to shape, in all woods, notably in Mahogany and Quarter-Sawn Oak.

We make no two-ply stock, and do not employ sliced cut quartered oak. Our quartered oak panels are all from sawed veneer.

Every pound of glue we use is guaranteed hide stock. We do not use retainers. Our gluing forms are put under powerful screws and left until the glue has thoroughly set.

If you seek a guaranteed product that is the best, based on results accomplished by most painstaking attention and study of every detail, combined with the use of the best stock and an up-to-date equipment, our product will appeal to you.

If you are a "price buyer" we probably cannot interest you.

KIEL WOODEN WARE CO.

WHEN IN THE MARKET FOR ROTARY CUT

BIRCH
BASSWOOD
OAK
ASH
ELM

VENEER

Write Us

WISCONSIN

KIEL
FACTORY AND MAIN
OFFICE

MELLEN
VENEER AND HEADING
MILL

PANELS PANELS PANELS

In Stock at Chicago Warehouse, 1140 West Lake Street
Telephone Haymarket 3027

WE WANT TO MOVE BEFORE JANUARY 1

3 PLY GOOD 1 SIDE

3/16 Ash 24 x 60 | 1/4 Ash 24 x 60 | 1/4 Basswood 24 x 60
30 x 60 | 30 x 72

The Wisconsin Seating Company,

New London, Wis.

HOWARD HANSON, President

THOMAS A. TURNER, Secy. and Treas.

THE HANSON-TURNER COMPANY

MANUFACTURERS OF

ROTARY CUT VENEER AND THIN LUMBER

ELM
BEECH
CURLY BIRCH

OAK
MAPLE

BIRCH
BASSWOOD
BIRD'S-EYE MAPLE

SPECIALTIES:

DRAWER BOTTOMS BACK PANELS CENTER STOCK
BACKING PIANO PIN BLOCKS BIRCH DOOR STOCK
CURLY BIRCH BIRD'S-EYE MAPLE

OFFICE and FACTORY at WELLS, N. Y.

VENEERS AND PANELS

CHESTNUT DOOR STOCK VENEERS

WE make a specialty of rotary cut Chestnut Door Stock Veneers for one, two, three and five panel doors, and are prepared at all times to fill orders promptly. We make it a point never to substitute brown ash when chestnut is ordered.

☐ We also manufacture door stock veneers in Red and White Oak, Poplar Cross-banding, Drawer Bottoms and special dimension Poplar, White Oak Veneers for furniture and piano makers, and other rotary cut products in Chestnut, Poplar, Red and White Oak not listed above.

☐ For prices and other information write to

RADFORD PORTSMOUTH VENEER CO., Radford, Virginia

Veneers and Panels with a Reputation

WE manufacture Veneers in all the native woods and for all purposes. Also Built-up Panels in native and foreign woods—three and five-ply—and have established a reputation for furnishing high-grade material. Send us your inquiries and orders and become one of our satisfied customers.

Underwood Veneer Co.

Wausau, Wis.

“SOVEMANCO.”

We can furnish anything you want in

Sawed and Sliced Foreign and Domestic Figured Veneers

Capacity 15 million feet per year. Ready to take care of carload orders promptly. Small orders shipped same day received, if desired.

SOUTHERN VENEER MFG. CO., Inc.

Office, 21st and Standard.

LOUISVILLE, KY.

Mills, Magnolia, Standard and 21st Sts.

For Veneer and Panel Manufacturers

Your Consumers' Lists Cost You BIG MONEY

We can save it all and relieve you of all the detail and effort necessary to tabulate consumers' wants. **Our Card Index System of those wants,** just out, is the result of systematic effort. It is endorsed by your competitor.

Can You Afford to Give Him that Advantage?

HARDWOOD RECORD

CHICAGO



M I C H I G A N



FAMOUS FOR HARD MAPLE AND GREY ELM

"Ideal" Steel Burn-ished Rock Maple Flooring

is the flooring that is manufactured expressly to supply the demand for the best. It is made by modern machinery from carefully-selected stock and every precaution is taken throughout our entire system to make it fulfill in every particular its name—"IDEAL."

ROUGH OR FINISHED LUMBER—ALL KINDS

Send Us Your Inquiries

The I. Stephenson Company - **WELLS, MICHIGAN**

Von Platen Lumber Co.

Iron Mountain, Michigan

Manufacturers of

**BIRCH
BASSWOOD
ELM
MAPLE**

We Solicit Your Inquiries

SHIPMENTS VIA C. & N. W.—C., M. & ST. P.—W. & M.

SALLING, HANSON CO.

MANUFACTURERS OF

Michigan Hardwoods

GRAYLING, MICHIGAN

"Chief Brand" Maple and Beech Flooring

in $\frac{3}{4}$, $\frac{1}{2}$ and 13-16 and 1 1-16 inch Maple in all standard widths and grades, will commend itself to you and your trade on its merits alone

WRITE US, WE CAN INTEREST YOU

Kerry & Hanson Flooring Co.

GRAYLING, MICHIGAN

1sts & 2nds	4/4	175,000
MICHIGAN	5/4	195,000
MAPLE	8/4	150,000
	10/4	75,000
For shipment from our	12/4	50,000
Detroit Yard during	16/4	110,000
October and November.		

PLEASE WRITE US QUICKLY FOR PRICES

THOMAS FORMAN COMPANY
DETROIT

IXL ROCK MAPLE Birch and Selected Red Birch FLOORING

*"The Standard" of Excellence*

**Wisconsin Land & Lumber
Company** Hermansville, Michigan

BIRCH, ASH, ELM, BASSWOOD AND HEMLOCK LUMBER
Basswood Siding, Ceiling, and Moulding

S. L. EASTMAN FLOORING CO.
SAGINAW BRAND

MAPLE FLOORING
SAGINAW, MICH.

MORE THAN 2,000 LUMBERMEN

are using the new Gibson Tally Book with its duplicate or triplicate tally tickets. If you haven't seen it, let us send you one with specimen tickets on approval. They solve your shortage and inspection troubles.

HARDWOOD RECORD**CHICAGO**

THE SOUTH

PROMINENT SOUTHERN MANUFACTURERS

Frank Purcell Kansas City
U. S. A.

Exporter of **Black Walnut Logs**



**FIGURED WALNUT IN LONG WOOD
AND STUMPS**

GARETSON-GREASON LUMBER CO.

1002-1005 Times Bldg.

ST. LOUIS

MANUFACTURERS

Three Mills

**Himmelberger-Harrison
Lumber Co.**

**Specialists
Red Gum**

Mills at
Morehouse, Mo.

Sales Offices
Cape Girardeau, Mo.

Salt Lick Lumber Co.

SALT LICK

KENTUCKY

MANUFACTURERS OF



Oak Flooring

Complete stock of $\frac{3}{8}$ " and $\frac{13}{16}$ " in all
standard widths

Louisiana Long Leaf Lumber Co.

Fisher, Louisiana

Diamond



Brand

OAK FLOORING
A GUARANTEE OF PERFECTION

IN spite of heavy demands for Tennessee Valley Hardwoods, we have a few items left:

2 cars $\frac{1}{4}$ 1s and 2s **PLAIN RED OAK** 10"—wider
4 cars $\frac{1}{4}$ No. 1 Common **PLAIN RED OAK** 10"—wider
2 cars $\frac{1}{4}$ 1s and 2s **PLAIN RED OAK** 6"—wider
1 car $\frac{1}{4}$ No. 1 Common **PLAIN RED OAK** 10"—wider
 $\frac{1}{2}$ car $\frac{1}{4}$ 1s and 2s **PLAIN RED OAK** 6"— $\frac{9}{16}$ "
 $\frac{1}{2}$ car $\frac{1}{4}$ 1s and 2s **PLAIN RED OAK** 6"— $\frac{9}{16}$ "
4 cars $\frac{1}{4}$ No. 1 Common **PLAIN WHITE OAK** 4"— $\frac{9}{16}$ "
3 cars $\frac{1}{4}$ No. 1 Common **PLAIN WHITE OAK** 10"—wider
1 car $\frac{1}{4}$ 1s and 2s **PLAIN WHITE OAK** 6"— $\frac{9}{16}$ "
1 car $\frac{1}{4}$ 1s and 2s **PLAIN WHITE OAK** 10"—wider
1 car $\frac{1}{4}$ 1s and 2s **PLAIN WHITE OAK** 6"—wider

The HHH Brand

H. H. HITT LUMBER COMPANY, DECATUR, ALABAMA

"WE ARE GETTING RESULTS"
WRITES ONE ADVERTISER

This Means That He Is Getting

NEW BUSINESS

Through His Ad

If we can do it for him is there any logical
reason why we can't for you?

MAKE US PROVE IT

HARDWOOD RECORD, CHICAGO

A FEW ITEMS OF DRY STOCK

We Want to Move

2 cars $\frac{1}{4}$ 1st & 2nds Cypress.
2 cars $\frac{1}{4}$ select Cypress.
4 cars $\frac{1}{4}$ No. 1 Shop Cypress.
1 car 2" 1sts & 2nds Cypress.
1 car 2" Select Cypress.
1 car $\frac{1}{4}$ 1sts & 2nds Cotton-wood.
5' cars 3" mixed oak Crossing Plank.
10 cars $\frac{1}{4}$ 1sts & 2nds Red Gum.
2 cars $\frac{1}{4}$ No. 1 Common Ash.
2 cars $\frac{1}{4}$ 1sts & 2nds Ash.
1 car 2" 1sts & 2nds Ash.
2 cars $\frac{1}{4}$ 18" & wider Panel Cottonwood.
 $\frac{3}{4}$ to $\frac{16}{4}$ No. 1 Common and better Plain Red and White Oak.

BAKER-MATTHEWS MFG. CO.

SIKESTON, MO.

WRITE US FOR PRICES

WISCONSIN

WHERE THE FINEST NORTHERN HARDWOODS GROW

WE MANUFACTURE MICHIGAN
HARDWOODS AND HEMLOCK.
MILLS ELECTRICALLY
DRIVEN; STOCK
BAND SAWN

Have in Shipping Condition

BIRCH: NO. 2 AND BETTER, 4/4 to 12/4
ASH: NO. 2 AND BETTER, 4/4 to 12/4
ELM: NO. 2 AND BETTER, 4/4 to 12/4
BASSWOOD: NO. 2 AND BETTER, 4/4
to 12/4

WE are well equipped for manufacturing
special sizes, wagon stock, skids, ties, etc.

THE C. A. GOODYEAR LUMBER COMPANY

Office and Mill
TOMAH, WISCONSIN

Logging Camp
BLUE BILL, MICHIGAN

GET OUR PRICES ON

1 car 1" No. 1 Common & Btr. Red Birch.
10 cars 1" No. 2 Common & Btr. Plain Birch.
5 cars 1" No. 1 and No. 2 Common Plain Birch.
2 cars 1 1/4" No. 2 Common & Btr. Plain Birch.
2 cars 1 1/2" No. 2 Common Plain Birch.

Can ship in straight or
mixed cars with other lumber

ROBBINS LUMBER COMPANY

Rhineland, Wisconsin

The Tegge Lumber Co.

MILWAUKEE
WISCONSIN

BUYERS OF
ALL KINDS OF

HARDWOOD LUMBER

SAWYER GOODMAN CO.

MARINETTE, WIS.

Mixed Cars of Hardwood, Bass-
wood, White Pine and Hemlock,
Cedar Shingles and Posts

We make a specialty of White Pine Beveled Siding and
White Pine Finish and Shop and Pattern Lumber

A FEW ITEMS IN DRY HARDWOOD for prompt shipment

1 car 5/4 1st & 2nd White Ash	1 car 8/4 Log Run Soft Maple
1 car 6/4 1st & 2nd Red Birch	4/4 Common & Better Hard
1 car 6/4 Common Plain Birch	Maple
2 cars 4/4 Common Plain Birch	4/4 No. 3 Common Hard Maple
5 cars 4/4 Common Red Birch	6/4 Log Run Hard Maple

Our new stock is now fairly dry
SEND US YOUR INQUIRIES

ARPIN HARDWOOD LUMBER CO.

Grand Rapids, Wis., Atlanta, Wis.,
Saw mills and planing mill at Atlanta, Wis.

Brown Bros. Lumber Co.

Manufacturers
and Wholesalers

Rhineland, Wis.

1 " No. 1 Com. & Btr. Hard Maple
1 1/4" No. 2 Com. & Btr. Hard Maple
1 1/2" No. 2 Com. & Btr. Hard Maple
2 " No. 1 Com. & Btr. Hard Maple
2 1/2" No. 2 Com. & Btr. Hard Maple
3 " No. 1 Com. & Btr. Hard Maple

DRY STOCK
AND CAN
MAKE
PROMPT
SHIPMENT

We want to move the following air-seasoned stock

5 cars 6/4" No. 2 Com. & Better Birch
3 cars 5/4" No. 2 Com. & Better Birch
1 car 8/4" No. 2 Com. & Better Birch
1 car 8/4" No. 1 Com. & Better Birch
3 cars 4/4" No. 1 Com. Birch
2 cars 4/4" No. 2 Com. Birch

OELHAFEN LUMBER CO.

TOMAHAWK, WISCONSIN

BUFFALO

The Foremost Hardwood Market of the East

ANTHONY MILLER
HARDWOODS
OF ALL KINDS
 893 EAGLE STREET

G. ELIAS & BRO.
HARDWOODS
 White Pine, Yellow Pine, Spruce,
 Hemlock, Fir, Lumber, Timber, Mill-
 work, Boxes, Maple and Oak Flooring
 955-1015 ELK STREET

Hugh McLean Lumber Co.
 OUR SPECIALTY:
QUARTERED
WHITE OAK
 940 ELK STREET

I. N. Stewart & Bro.
Specialties
Cherry and Oak
 892 Elk Street

Standard Hardwood Lumber Co.
OAK, ASH and
CHESTNUT
 1075 Clinton Street

BUFFALO HARDWOOD LUMBER CO.
 We want to buy for cash
OAK, ASH AND OTHER HARDWOODS
 All grades and thicknesses.
 Will receive and inspect stock at shipping point.
 Branch yard, Memphis, Tenn.
 940 Seneca Street, **BUFFALO**

T. SULLIVAN & CO.
 SPECIALTIES:
Gray Elm, Brown Ash
 Pacific Coast Fir and Spruce
 2 ARTHUR STREET

ORSON E. YEAGER
 SPECIALTIES:
Oak, Ash and Poplar
 932 ELK STREET

The above firms carry large and well assorted stocks of all kinds and grades of Hardwoods, and have every facility for filling and shipping orders promptly. They will be pleased to have your inquiries.

Vansant,

Manufacturers Old-Fashioned

5-8 and 4-4
in Wide Stock,
Specialty

Kitchen &

Soft
Yellow
Poplar

Company

Ashland, Kentucky

EASTERN REPRESENTATIVE, John L. Cochran
601 W. 115th Street, New York City

CHICAGO OFFICE, Steger Building
W. H. Matthias, Manager.

FLOORING

OAK — BEECH — MAPLE

KILN DRIED

END MATCHED

TELEPHONE YOUR ORDER OR INQUIRY TO OUR SALESMEN—WE WILL PAY THE CHARGES

W. M. RITTER LUMBER CO., COLUMBUS, OHIO

W. H. White Company

Boyne City Lumber Company

Mills and General Office: BOYNE CITY, MICH.

Sales Office: BUFFALO, N. Y.

WE OFFER

4/4 and 5/4 No. 2 common and better
Basswood

4/4 No. 2 common and better Brown
Ash

4/4 and 5/4 No. 2 common and better
Birch, strictly unselected for color

4/4 and 5/4 No. 1 and No. 2 common
Flooring Maple.

4/4, 5/4, 6/4, 8/4, 10/4, 12/4 and 16/4
Firsts and Seconds Maple

STOCK DRY—STANDARD GRADES—BEST
MANUFACTURE—CAR OR CARGO SHIPMENTS

YELLOW POPLAR

MANUFACTURERS OF BAND SAWED

POPLAR
QUARTERED OAK
PLAIN OAK
CHESTNUT
BASSWOOD



SPECIALTY
QUARTER SAWED
WHITE OAK

Coal Grove, Ohio, U. S. A.

LUMBER CO.

Hardwood Record

Eighteenth Year, }
Semi-Monthly. }

CHICAGO, NOVEMBER 25, 1912

{ Subscription \$2.
{ Single Copies, 10 Cents.

LARGEST VENEER PLANT IN THE WORLD

C. L. WILLEY

MANUFACTURER OF

MAHOGANY, VENEER

HARDWOOD LUMBER

OFFICE, FACTORY AND YARDS:

2558 South Robey Street

Telephone Canal 930

BAND MILLS, MEMPHIS, TENN.

CHICAGO

W A N T E D

All Kinds of High-Grade

HARDWOODS

S.E. SLAYMAKER & CO.

Representing
WEST VIRGINIA SPRUCE LUMBER CO.,
Cass, West Virginia.

Fifth Ave. Bldg.,
NEW YORK

On the Following Stock We Will Make Special
Prices for Prompt Shipment:

80,000 ft. 1½" No. 2 Com. Poplar
121,000 ft. 2" No. 2 Com. Poplar
10,000 ft. 1¼" No. 1 & 2 Qtd. Poplar.
141,000 ft. 1" S. W. & No. 2 Com. Chestnut
107,000 ft. 1¼" S. W. & No. 2 Com. Chestnut
495,000 ft. 1½" S. W. & No. 2 Com. Chestnut
50,000 ft. 1½" No. 2 Common Plain Oak.
210,000 ft. 2" No. 2 Common Plain Oak.
40,000 ft. 1x12" & up No. 1 & 2 Chestnut.

THE ATLANTIC LUMBER CO.

70 Kilby St., BOSTON, MASS.

Keys-Walker Lumber Co.

Manufacturers

West Virginia Hardwoods

Soft Yellow Poplar

Oak—Chestnut—Bass—Hemlock, Etc.

Rough or Dressed

Write for Prices

ROANOKE, VIRGINIA

ICHABOD T. WILLIAMS & SONS

**Foreign and Domestic Woods
In Logs, Lumber and Veneers**

11th Ave. and 25th Street
NEW YORK

910 So. Michigan Avenue
CHICAGO

Hadentine Lumber Co.

Incorporated

Spruce, Hardwoods and Hemlock
in the same car

Office: Camden, N.J.

Mills: Horton, Dobbin and Laneville, W. Va.
Crestmont and Sunburst, N. C., and Norfolk, Va.

N. C. PINE

WHITE PINE

PROCTOR **VENEER DRYER** FIREPROOF
—AN—
UNPARALLELED SUCCESS

No
Splitting
Nor
Checking
No
Clogging
Nor
Adjusting



Recom-
mended by
all those
who
have tried
it

THE PHILADELPHIA TEXTILE MACHINERY COMPANY
DEPT. L HANCOCK & SOMERSET STS. PHILA PA.

One Carload or a Dozen—

Either order will have such attention as will insure shipment on the date promised.

With nearly fifty shipping points we are often able to save considerable on the transportation, besides securing prompt delivery.

Besides, there is the satisfaction in knowing the **quality** and **price** are sure to be right.

**“Everything in Lumber—
Hardwood a Specialty”**

J. GIBSON McILVAIN & Co.
1420 Chestnut Street **PHILADELPHIA**

On the Upturn

Prosperity in the United States comes in recurring waves which rise in obedience to the dynamic force of an energetic people and carry property values to new heights.

This is especially true of their effect on timber values.

It is remarkable, also, that timber values remain at the high point to which the waves of prosperity carry them. The temporary exhaustion of the force that moves values leaves them stationary until the next tide.

Those who do not own timber are not benefited by this force. The waves have nothing to carry for their account.

This oversight on your part may be remedied very easily. Timber may be bought on good terms now. The tide will carry any load.

The force of the next tidal wave of prosperity is now being felt.

Secure particulars of some of the attractive bargains we are offering in western lands.

Let the next wave of prosperity work for you.

JAMES D. LACEY & CO.

TIMBER LAND FACTORS

1215 Old Colony Bldg.
CHICAGO

1104 Spalding Bldg.
PORTLAND, ORE.

1009 White Bldg.
SEATTLE

MICHIGAN

FAMOUS FOR HARD MAPLE AND GREY ELM

Michigan Hardwoods

MANUFACTURED BY

COBBS & MITCHELL, Inc.

CADILLAC, MICH.

October 29th, 1912

DRY STOCK LIST

4/4 Ash No. 2 Common & Better.....	20 M
4/4 Basswood No. 1 Common.....	100 M
4/4 Cherry No. 3 Common & Better.....	9 M
4/4 Cadillac Gray Elm No. 1 Common.....	80 M
4/4 Cadillac Gray Elm No. 2 Common.....	60 M
6/4 Cadillac Gray Elm, No. 1 and 2 Common.....	20 M

"It is not what lumber costs you, so much as what you can get out of it, that decides its value for your work."

OUR OWN MANUFACTURE

W. D. YOUNG & CO.

MANUFACTURERS

FINEST MAPLE FLOORING

KILN DRIED, HOLLOW BACKED
MATCHED OR JOINTED
POLISHED AND BUNDLED

Hard Maple, Beech and Birch Lumber

1 TO 6 INCHES THICK WRITE FOR PRICES
BAY CITY, :: :: MICHIGAN

Something New For Your Factory Floors

Utility Joined With Economy

We are now manufacturing what we call a No. 2 Factory grade of Hardwood Flooring which can be used successfully in factory buildings where good wearing qualities rather than appearance are required. This Flooring is made from the hardest portion of the log, and while the Flooring shows the heart defect to a considerable extent, nevertheless it will wear with wonderful durability.

It is 13/16 x 2 1/4" face, and the Flooring is kiln dried, hollow backed, bored, end matched, steel scraped and bundled.

Write us about it. This is a grade of Hardwood Flooring you should know about. Address MITCHELL BROTHERS COMPANY, Sales Department, CADILLAC, MICHIGAN.

THE Kneeland-Bigelow Co.

300,000 Feet

5/4 No. 2 Common and Better Beech

HARDWOOD MANUFACTURERS

250,000 ft. 5/4 No. 1 Common Basswood

This is of good average widths and lengths, containing a large percentage of 16 ft.

All of the above stock is nicely manufactured, being band sawed, trimmed, and well seasoned. We are prepared to quote attractive prices for this material for immediate shipment.

BAY CITY, MICH.

CHICAGO

THE GREATEST HARDWOOD MARKET IN THE WORLD

J. RAYNER VENEERED PANELS

ALL WOODS
SEND FOR STOCK LIST

MAHOGANY LUMBER

CARROLL AVE. AND SHELDON ST.
CHICAGO

Estabrook-Skeeel Lumber Co.

MANUFACTURERS AND DEALERS IN

Maple, Birch, Elm, Basswood, Ash
And Other Northern Hardwoods

In the Market for Round Lots of Hardwood

WRITE US BEFORE SELLING

Fisher Building, - - - CHICAGO

PHONE HARRISON 1984



A floor to adore

For thirty-three years Wilce's Hardwood Flooring has been among the foremost on the market and because it stands today "unequaled" is the best evidence that its manufacturer has kept abreast of modern methods and the advanced demands of the trade. To convince yourself of the above statements, try our polished surface flooring, tongued and grooved, hollow backed, with matched ends and holes for blind nailing—you'll find it reduces the expense of laying and polishing.

Our Booklet tells all about Hardwood Flooring and how to care for it—also prices—and is free.

The T. Wilce Company

22nd and Throop Sts. CHICAGO, ILL.

Going up—Hardwood Timber

We have the following hardwood and pine timber for sale at prices that have not as yet been advanced with the rise in value on timber lands. For a short time we offer—

150,000,000 FEET HARDWOOD IN SOUTHEAST ARKANSAS — A SPLENDID OPPORTUNITY.

7,600,000 FEET OF HARDWOOD IN SOUTH-WEST ARKANSAS

We also have timber in British Columbia and on the Pacific Coast and Oregon.

For further particulars, address

John C. Spry

Room 1003 Harris Trust Bldg.,

Chicago, Illinois

HARDWOOD AND YELLOW PINE LUMBER

*In Stock, Ready
To Ship*

3 cars 1x6 and wider 1st & 2nd Cottonwood
3 cars 1x9 to 12" Cottonwood Box Boards
4 cars 1" No. 1 Common Cottonwood
4 cars 1" No. 1 Common Sap Gum

WE make
a spe-
cialty of Oak
Timber and
Car Stock.

WRITE US FOR PRICES ON YELLOW PINE TIMBER, FLOORING, CEILING AND FINISHING.
SCHULTZ, HOLLOWAY CO., 343 South Dearborn Street, CHICAGO

SAVE YOUR MONEY BY USING THE

RED BOOK

Published Semi-annually
in February and August

It contains a carefully prepared list of the buyers of lumber in car lots, both among the dealers and manufacturers.

The book indicates their financial standing and manner of meeting obligations. Covers the United States, Alberta, Manitoba and Saskatchewan. The trade recognizes this book as the authority on the lines it covers.

A well organized Collection Department is also operated and the same is open to you. Write for terms.

Lumbermen's Credit Assn., ESTABLISHED 1878

608 So. Dearborn St.
CHICAGO

Mention This Paper.

116 Nassau Street
NEW YORK CITY

"WE ARE GETTING RESULTS"
WRITES ONE ADVERTISER

This Means That He Is Getting

NEW BUSINESS

Through His Ad

If we can do it for him is there any logical
reason why we can't for you?

MAKE US PROVE IT

HARDWOOD RECORD, CHICAGO

500 Copies Sold Within a Week After Prospectus Was Issued

Hardwood Record announces the issue on January 1,
1913, of an Authoritative Commercial and Scientific Book

American Forest Trees

By Henry H. Gibson, Editor Hardwood Record
Edited by Hu Maxwell, Wood Utilization Expert

The Work Involves :

First: A botanical description of the more than 300 species of American forest tree growth.

Second: A physical description of the wood of these species.

Third: A recital of the chief uses of all important American woods, together with suggestions of advantageously broadening their uses.

Fourth: Complete information concerning the range of growth of all varieties.

Fifth: Related trees are logically grouped according to families and spe-

cies; important species covered in substantial detail, and brief mention of the woods of minor importance.

Sixth: Scientific name of each tree is recited, as well as the various common names by which it is recognized in different parts of its range of growth.

Seventh: The properties of the various woods are carefully analyzed, particularly weight, hardness, stiffness, strength, elasticity, toughness, color, figure, and seasoning and lasting properties.

☐ The book will contain between 650 and 750 pages, will be printed on the best quality of enameled paper, and handsomely bound in half leather, dark green roan back and corners, with basket cloth sides, silk head-bands, gold stamping on the back, and gilt top.

☐ The work will be illustrated with more than 100 full-page pictures on plate paper in sepia, outlined in orange, from photographs, covering all the chief commercial varieties of virgin forest timber growing in the United States; and also with numerous engravings, from drawings and photographs, showing leaf and flower forms, etc.

☐ The price of the work is \$6.00, delivered by express or mail, and is sold only on subscription.

☐ An order blank, and a prospectus, showing the character of the paper, size of page and style of printing will be forwarded on application.

Address Book Department, HARDWOOD RECORD

537 South Dearborn Street

Chicago, Illinois

ORDERS SHOULD BE PLACED AT ONCE

KNOXVILLE

Famous for Finest Type of Poplar, Oak and Chestnut

VESTAL LUMBER AND MANUFACTURING CO.

KNOXVILLE, TENNESSEE.

QUARTERED WHITE OAK

OUR SPECIALTY

MANUFACTURERS OF

QUARTERED WHITE OAK, PLAIN OAK, POPLAR, WALNUT & TENNESSEE RED CEDAR LUMBER

BAND MILLS AT VESTAL, A SUBURB OF KNOXVILLE. SOUTHERN AND LOUISVILLE & NASHVILLE RAILROAD

H. S. MIZNER,
Pres.

C. C. CANNON,
Vice-Pres.

J. M. LOGAN,
Gen'l Manager

C. R. SWANN,
Sec'y and Treas.

LOGAN - MAPHET LUMBER CO.

MANUFACTURERS AND WHOLESALERS
HARDWOODS AND PINE
POPLAR A SPECIALTY

Main Office and Yards: Knoxville

Branch Office and Yard:

Bank and McLean Ave., Cincinnati I. M. ASHER, Mgr.

We Want Orders for the following Dry Stock:
WHITE OAK—Plain or Quartered.

RED OAK—Plain or Quartered.

CHESTNUT

BASSWOOD

POPLAR

WHITE PINE

Always carry large well
assorted stock of all
kinds of Hardwoods.

CAN SHIP ON SHORT NOTICE.

Maphet & Shea Lumber Co.

Manufacturers
and Wholesalers

OFFICE: 703-705 HENSON BUILDING

Yard: Middlebrook Pike and
Lonsdale Car Line

KNOXVILLE, TENN.

WE WANT TO MOVE

3 cars 4/4 No. 1 Common Poplar, 7" & up
2 cars 4/4 Clear Sap Poplar, 7" & up
1 car 4/4 Select Poplar, 7" & up
1 car 4/4 1 & 2 Red Oak, 10" & up
1 car 4/4 1 & 2 Chestnut
1 car 4/4 No. 1 Common Chestnut

We manufacture: YELLOW POPLAR,
OAK, CHESTNUT, WHITE AND YEL-
LOW PINE, HEMLOCK BARK, ETC.

BAND AND CIRCULAR MILLS—EAST TENN.
MOUNTAIN VIRGIN HARDWOOD STUMPAGE

Kimball & Kopcke

Knoxville, Tennessee

Manufacturers and Shippers of

Appalachian Hardwoods

OAK OUR SPECIALTY

"THE VERY BEST"

Veneers in Any Wood

ASH, GUM

CHESTNUT

WHITE OAK

RED OAK

PINE, POPLAR

WALNUT

Knoxville Veneer Co.

P. B. RAYMOND, General Manager, Knoxville, Tenn.

NASHVILLE

CELEBRATED FOR HIGHEST TYPE TIMBER GROWTH, FAULTLESS
MANUFACTURE AND GOOD GRADES.

If you want to get in touch with 2000 Live Wire Buyers of Hardwoods

it will pay you to find out about
the Hardwood Record's

BULLETIN SERVICE

One man, who uses the service
gives it credit for earning annu-
ally \$10,000 for him.

Write for pamphlet—

"Selling Lumber By Mail"

It will prove a revelation to you.

HARDWOOD RECORD

(Bulletin Dept.)

537 So. Dearborn St.,
CHICAGO

We will name very attractive
prices on a few cars of each of the
following items:

4 4, 6/4, 10/4 and 12 4 1s and 2s Poplar
4 4 and 8/4 Sap Poplar.
1 1/4", 1 1/2" and 2 1/2" No. 1 Common Poplar.
4 4 No. 1 and Panel Poplar in widths of 12 to 17", 18 to 23"
and 24" and up.
4 4 x 13 to 17" Poplar Box Boards.
4/4 1s & 2s Basswood or Linn—very fine.
3/8, 4/4, 5/4, 10/4 and 12/4 1s & 2s Qtd. W. Oak.
4/4, 5/4, 6/4 and 8/4 No. 1 Common Qtd. W. Oak.
6/4 1s & 2s Qtd. R. Oak.
4/4, 5/4 and 6/4 No. 1 Common Qtd. R. Oak.
6/4 and 10/4 1s & 2s Hickory.
4/4, 6/4, 10/4 and 12/4 No. 1 Common Hickory.
4/4, 6/4, 8/4, 10/4 and 12/4 No. 2 Common Hickory.
4/4 1s & 2s Chestnut, also 5, 6 and 8/4.
4 4 No. 1 Common Chestnut

John B. Ransom & Co.

MANUFACTURERS OF

Hardwood Lumber

Nashville, Tenn.

IF YOU BUY LUMBER

Naturally you want only well manufactured stock, clean
grades and prompt service. We can give you all three.

We have a well assorted stock of Plain and
Quartered Red and White Oak, Poplar, Ash,
Chestnut, Hickory and Aromatic Tennessee
Red Cedar, practically all of which is our
own manufacture.

LOVE, BOYD & CO., - Nashville, Tenn.

Cherokee Lumber Co.

Manufacturers of all the lumber we sell.
Let us quote you some attractive prices
on quartered white oak and poplar.
Any grades and thicknesses.

NASHVILLE, TENN.

Tennessee Hardwoods

Tennessee Hardwood
Lumber Co.

West Nashville

G The Gibson Aluminum Tally Book Cover
and Tally Tickets are now employed by
more than 2,000 lumber manufacturers,
dealers and consumers.

LAMB-FISH LUMBER CO.



Band Mill and General Offices

CHARLESTON, MISS.

**THE LARGEST HARDWOOD MILL IN THE WORLD
ANNUAL CAPACITY, 40,000,000**

STOCK LIST—Dry Lumber on Hand November 1, 1912

TELEGRAPH
CODES
UNIVERSAL
HARDWOOD
WESTERN UNION
Cable Address, Lamb

	3/8	1/2	5/8	3/4	4/4	5/4	6/4	8/4	10/4	12/4	16/4
FAS Qrtd. White Oak 6" & up.....	6,000	60,000	20,000	40,000	30,000	.....	7,000	.....	.....	.....	.....
No. 1 Com. Qrtd. White Oak 4" & up.....	.....	12,000	.....	12,000	140,000	.....	.....	.....	.....	.....	.....
No. 2 Com. Qrtd. White Oak.....	.....	5,000	.....	.....	.....	.....	.....	.....	.....	.....	.....
FAS Plain White Oak 6" & up.....	30,000	120,000	140,000	80,000	.....	40,000	.....	4,000	3,000	.....	2,000
FAS Plain White Oak 12" & up.....	.....	.....	.....	4,000	.....	.....	.....	.....	.....	.....	.....
No. 1 Com. Plain White Oak 4" & up.....	.....	18,000	40,000	10,000	100,000	5,000	.....	.....	9,000	.....	.....
FAS Plain Red Oak 6" & up.....	.....	.....	.....	20,000	150,000	.....	.....	.....	.....	.....	1,000
No. 1 Com. Plain Red Oak 4" & up.....	.....	.....	15,000	25,000	.....	.....	18,000	1,000	.....	.....	.....
FAS Red Gum.....	200,000	150,000	110,000	250,000	220,000	40,000	70,000	40,000	.....	3,000	.....
FAS Quartered Red Gum.....	.....	.....	.....	.....	.....	.....	.....	3,000	.....	.....	.....
FAS Circassian Red Gum.....	.....	.....	.....	12,000	40,000	.....	3,000	1,000	.....	.....	.....
No. 1 Com. Red Gum.....	60,000	20,000	130,000	40,000	.....	50,000	.....	5,000	.....	.....	.....
FAS Sap Gum 18" & up.....	.....	.....	.....	.....	100,000	.....	.....	.....	.....	.....	.....
FAS Sap Gum Reg. W. & L.....	50,000	40,000	20,000	.....	.....	15,000	10,000	15,000	.....	.....	.....
No. 1 Com. Sap Gum.....	.....	.....	100,000	.....	190,000	.....	.....	.....	.....	.....	.....
No. 2 Com. Sap Gum.....	50,000	35,000	25,000	.....	.....	200,000	.....	.....	.....	.....	.....
Shop & Better Cypress.....	.....	.....	.....	.....	.....	.....	.....	50,000	.....	.....	.....
No. 1 Com. Cypress.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Log Run Elm.....	.....	.....	.....	.....	.....	.....	20,000	20,000	.....	.....	.....
Common & Better Tupelo.....	.....	.....	.....	.....	40,000	.....	.....	.....	.....	.....	.....

OUR LUMBER CONTAINS ALL WIDE STOCK PRODUCED IN MANUFACTURING AND WILL RUN OVER 50% OF 14 AND 16 FT. LENGTHS. WE ALSO MANUFACTURE OAK TIMBERS AND BRIDGE PLANK—FACILITIES FOR KILN DRYING AND DRESSING

"STEARNS" QUALITY LUDINGTON

HARDWOOD SPECIALISTS

OUR WINTER SUPPLY OF DRY

THICK HARD MAPLE

is now ready for the market. We have a nice assortment of 1 1/4", 1 1/2", 2", 3" and 4".

Quotations will be given cheerfully

The **STEARNS**
SALT & LUMBER CO. LUDINGTON, MICH.

BAND SAWN HARDWOODS

WE PRODUCE OUR OWN STOCKS

OAK—Plain and Quartered, Red and White

COTTONWOOD—Ash, Southern Elm, Gum, Soft Maple

A FEW ITEMS WE WANT TO MOVE:

- 100,000 feet 5/4" x 13" to 17" 1sts & 2nds Cottonwood.
- 110,000 feet 4/4" x 22" & up No. 1 & Panel Cottonwood.
- 200,000 feet 4/4" x 13" to 17" Cottonwood Box Boards.
- 75,000 feet 4/4" 1sts & 2nds Quartered White Oak.
- 97,000 feet 4/4" No. 1 Common Quartered White Oak.
- 115,000 feet 4/4" 1sts & 2nds Red Gum.
- 200,000 feet 4/4" to 8/4" No. 1 Shop & Better Cypress.

WRITE US FOR PRICES

ANDERSON-TULLY COMPANY
HARDWOOD LUMBER **Memphis, Tenn.**

FOR SALE = \$15,000

Imperial Spoke and Rim Plant

Equipment, Machines, Tools,
 Furnishings and All Supplies

Dyersburg, Tennessee

THIS PROPERTY INVENTORIES \$27,000

TERMS: CASH - - \$10,000
 NOTES - - \$ 5,000

Payable \$1,000 Annually

OFFER GOOD UNTIL DECEMBER 1, 1912

ADDRESS QUICK

Durant-Dort Carriage Co., Owners
FLINT, MICHIGAN

Wausau

"The Place for Wood-Using Factories"

WAUSAU has a large tributary supply of Hemlock, Tamarack, Pine, Cedar, Birch, Basswood, Hard and Soft Maple, Rock and Soft Elm, Ash and other timber.

CENTRALLY LOCATED, with good freight service in all directions, dependable labor, cheap electric power, suitable factory sites, healthful climate, and the best of living conditions. **WAUSAU** offers excellent facilities for the manufacture and shipment of:

Hubs	Toothpicks
Dowels	Silos
Vehicle Parts	Last Blocks
Tanks	Kitchen Cabinets
Handles	Sporting Goods
Refrigerators	Woodenware

Let us send you our booklets, "Wausau, a Good Place to Come," and "Factory Facilities in Wausau." Please ask for them on your business letterhead.

The Wausau Advancement Association
 Wausau, Wisconsin

WEST VIRGINIA

WHERE THE BEST HARDWOODS GROW

West Virginia Timber Company

POPLAR, OAK,
CHESTNUT AND BASSWOOD
LUMBER.
BELL OAK, HEMLOCK, CHAIR
AND
DIMENSION STOCK.

CHARLESTON, W. VA.

30,000 ft 4/4 Clear Saps Poplar.
50,000 ft. 4/4 No. 1 Common & Selects Poplar.
100,000 ft. 4/4 No. 2 "A" Common Poplar.
50,000 ft. 5/4 No. 1 Common Poplar.
50,000 ft. 6/4 No. 1 Common Poplar.
15,000 ft. 4/4 x 13-17" Poplar Box Boards.
17,000 ft. 4/4 x 9-12" Poplar Box Boards.
15,000 ft. 4/4 x 24 and up Panel & Wide Poplar.

20,000 ft. 6/4 No. 1 Common & Better Chestnut.
15,000 ft. 5/4 Log Run Basswood.
90,000 ft. 4/4 1sts & 2nds Red Gum.
75,000 ft. 4/4 No. 1 Common Red Gum.
50,000 ft. 4/4 1sts & 2nds Sap Gum.
60,000 ft. 4/4 Selects & Better Cypress.
50,000 ft. 4/4 No. 1 Common & Shop Cypress.
40,000 ft. 4/4 No. 2 Common Cypress.
25,000 ft. 8/4 No. 2 Common & Pecky Cypress.

Peytona Lumber Company Inc.

WHOLESALE MANUFACTURERS

HARDWOOD LUMBER

HUNTINGTON, W. VA.

Yellow Poplar, Basswood, Chestnut, Oak, Ash

BAND MILL AND YARDS,
1st Ave. and 20th to 24th Sts.

10 cars 4/4 Select & No. 1 Com. Poplar (50% Selects,
60% 14' & 16' long).
4 cars 4/4 13" to 17" Poplar Box Boards (75% 14' &
16').
2 cars 4/4 No. 1 Panel Poplar, 18" to 23" (60% 14'
& 16').
1 car 4/4 No. 1 Panel Poplar, 24" & up (60% 14' & 16').

All high-grade band sawn stock. Good widths.

DRY STOCK

1 car 10, 12 & 16/4 C & B Plain OAK.	2 cars 6/4 No. 1 Com. POPLAR.
3 cars 4/4 No. 1 Com. Plain OAK.	3 cars 4/4 Log Run BASSWOOD.
2 cars 4/4 No. 2 Com. Plain OAK.	2 cars 4/4 Log Run BUCKEYE.
1 car 4/4 1s & 2s POPLAR.	1 car 8/4 Log Run MAPLE.
1 car 4/4 Sap POPLAR.	1 car 4/4 No. 1 C & B MAPLE.
3 cars 4/4 No. 1 Com. POPLAR.	1 car 5/4 C & B CHESTNUT.

Send Us Your Inquiries

Boice Lumber Co., Inc.
RICHMOND, VIRGINIA

WE MANUFACTURE AND
DEAL IN

TIES, HARDWOOD LUMBER AND TIMBER

We want to buy a large
amount of 4/4, 8'-8'6"
Oak from Tie Sides

Hill Bros. Tie & Lumber Company
Charleston, W. Va.

Variety is the Spice—

Specialization is one of the necessities of modern business, affecting somewhat the human truth of the declaration regarding variety. The problem usually is to provide the variation without scattering one's shot too much.

In Louisville is found variety without weakness and concentration without narrowness. In other words, Louisville has the most general line of hardwood stocks of any producing center in the country. Some towns are strong on poplar; others long on quartered oak and a few good in gum. Some have fine offerings in veneers and fancy woods; some shine when it comes to ash or hickory; but few of them do much outside their specialty.

There isn't an item in the list just named which cannot be had, in quantity, in Louisville. This means, for the buyer, that when he comes to Louisville he need "shop" no longer. He can mark everything he needs off the list, for he can get it—at a satisfactory price—right here. And for the buyer who wants a mixed car of lumber, involving three or four items, "club service" cannot be surpassed.

Try us out at either end of the proposition and see how it works.

The Louisville Hardwood Club

OHIO RIVER SAWMILL COMPANY

NORMAN LUMBER COMPANY
Mill at Holly Ridge, La.

C. C. MENGEL & BRO. CO.

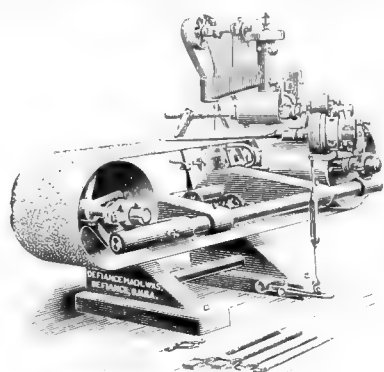
W. P. BROWN & SONS LUMBER COMPANY

EDWARD L. DAVIS LUMBER COMPANY

BOOKER-CECIL COMPANY

THE LOUISVILLE VENEER MILLS

LOUISVILLE POINT LUMBER COMPANY



No. 6 Automatic Belt Polisher

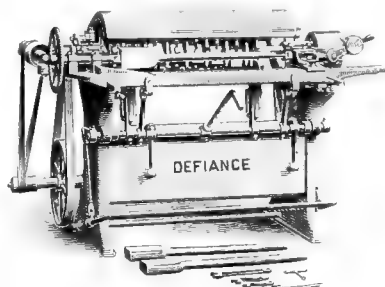
We know that DEFIANCE machines are known to the manufacturing public by reason of their past performance.

We know that what they have done for hundreds of customers they will do for you, with the same uniformity and smoothness.

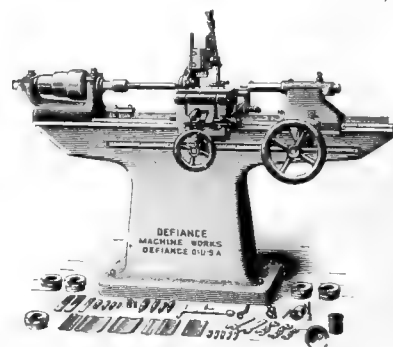
We know that although we must stand competition, there is but one way to get DEFIANCE results, the best the world over, and that is with DEFIANCE machines.

If we have not supplied you with a catalogue and prices, write us for them TODAY

The Defiance Machine Works 414 Perry St., Defiance, Ohio



"D" Handle Turning Lathe



No. 0 Variety Turning and Boring Lathe

LET THE MACHINES PAY FOR THEMSELVES

YOU WILL PAY FOR

DEFIANCE

WOOD-WORKING MACHINES

You are paying for them just the same, whether you install them or not, as long as you continue to pay more for your labor cost.

They insinuate themselves in every possible opening where the demand calls for efficiency and superior work.

ESTABLISHED 1869

**Adams & Raymond
Veneer Co.**

INDIANAPOLIS, INDIANA
MANUFACTURERS
OF
PLAIN & FIGURED
VENEERS

CIRCIASSIAN } WALNUT
AMERICAN }

QUARTERED OAK

ANY
WOOD

ANY
THICKNESS



IF YOU HAVEN'T SEEN THE GIBSON TALLY BOOK

Let us send you one on approval, with samples of Tally Tickets for triplicate, duplicate or single tallies—a score of forms to choose from. They are the latest and best. Endorsed by hundreds of lumber manufacturers and buyers.

HARDWOOD RECORD

CHICAGO

CINCINNATI

THE GATEWAY OF THE SOUTH

Why Is Cincinnati? The Leading Veneer Market •

SEE THE ADVERTISERS ON THIS PAGE AND YOU WILL KNOW

OHIO VENEER COMPANY

OFFICE AND MILLS:

**2624-2634 Colerain Avenue
CINCINNATI OHIO**

WE OFFER THE FOLLOWING VENEER FOR SALE:

600,000 ft. 1/28" Cut Circassian Walnut Veneer
1,500,000 ft. 1/28" Slice Cut Figured African Mahogany Veneer
100,000 ft. 1/24" Slice Cut Figured African Mahogany Veneer
125,000 ft. 1/20" Sawed Mexican Mahogany Veneer
200,000 ft. 1/20" Sawed Quartered White Oak Veneer
280,000 ft. 1/20" Slice Cut Quartered White Oak Veneer
150,000 ft. 1/28" Slice Cut Quartered White Oak Veneer
350,000 ft. 1/28" Slice Cut Figured Gum Veneer
50,000 ft. 1/28" Slice Cut Quartered Sycamore
600,000 ft. Slice Cut African Mahogany Crotch Veneer
70,000 ft. Cut Bird-Eye Maple Veneer

ACME VENEER & LUMBER COMPANY CINCINNATI OHIO

Our mill is now cutting what is said to be the **LARGEST VIRGIN WHITE OAK** timber in Ohio. It is of soft, brashy texture from the best White Oak Section.

Our new line of Circassian is ready for the market.

Do not overlook us when in the market for

MAHOGANY

CURLY BIRCH

ROSEWOOD

OR ANY KIND OF PLAIN VENEER

We make a specialty in all woods of 1/8, 3/16 and 1/4 thicknesses for Interior Finish and Door Work.

C If you are not a subscriber to **HARDWOOD RECORD** and have a suspicion that you would like to see a copy, it is yours for the asking.

The Maley, Thompson
& Moffett Co.

**Veneers, Mahogany and
Hardwood Lumber**

Largest Stocks

Best Selections

CINCINNATI, OHIO

CINCINNATI

THE GATEWAY OF THE SOUTH

FOR QUICK SHIPMENT

5 cars 4 4" Sap & Sel. Poplar.
 5 cars 6 4" No. 1 Common
 Poplar.
 4 cars 4 4" 1s & 2s Plain
 White Oak.
 4 cars 5 4" 1s & 2s Plain
 White Oak.
 1 car 6 4" 1s & 2s Plain
 White Oak.

5 cars 4 4" No. 1 Com. Plain
 White Oak.
 4 cars 5 4" No. 1 Com. Plain
 White Oak.
 2 cars 6 4" No. 1 Com. Plain
 White Oak.
 1 car 8 4" No. 1 Com. Plain
 White Oak.

All the above stock Thoroughly Dry, Band Sawn and Equalized

GET OUR PRICES

KENTUCKY LUMBER COMPANY
 CINCINNATI, OHIO

W. E. HEYSER, President WEAVER HASS, V. President
 BENJAMIN BRAMLAGE, Sec'y & Treas.

The W. E. Heyser Lumber Company

MAIN OFFICE & YARDS
 Winton Place
 Cincinnati, Ohio

BRANCH YARDS AND MILLS
 West Virginia, Mississippi, Arkansas & Kentucky

12,000,000 ft. High Shipments made
 Grade West Vir- direct from our
 ginia and Southern own yards and
 Hardwoods in mills in straight or
 stock at all times. mixed cars.

SEND US YOUR INQUIRIES

MOWBRAY & ROBINSON

SPECIALISTS IN

OAK—ASH—POPLAR

ALWAYS IN THE MARKET FOR
 ROUND LOTS OR MILL CUTS

OFFICE AND YARDS
 SIXTH ST., BELOW HARRIET

CINCINNATI

L. W. RADINA & CO.

DEALERS IN

POPLAR AND HARDWOODS

CINCINNATI : : OHIO

CINCINNATI

THE GATEWAY OF THE SOUTH

WE WANT TO BUY

1", 1 1/4", 1 1/2" 1s & 2s AND NO. 1 COMMON SAP GUM
1", 1 1/2" & 2" 1s & 2s AND NO. 1 COMMON RED GUM
1" NO. 1 COMMON TUPELO.

SUBMIT US YOUR STOCK SHEETS
WITH BEST CASH PRICES

DUHLMEIER BROS.
CINCINNATI, OHIO

WE SELL "SERVICE"

in connection with a full line
of OAK, GUM, POPLAR,
and other HARDWOODS

If you appreciate "service," in
all its details, write, wire or phone

THE M. B. FARRIN LUMBER CO.
CINCINNATI, OHIO

E. C. Bradley Lumber Co.

705-706 Gerke Building, Cincinnati, Ohio

20,000' 4/4 1's & 2's Cherry. 4 cars 3" No. 1 Common & Bet-
15,000' 4" No. 1 Common & Bet- ter Hard Maple.
6 cars 4/4 No. 2 Common Hard Maple.

ABOVE IS ALL WEST VIRGINIA STOCK.

2 cars 4/4 1's & 2's Yel. Poplar. 1 car 3" No. 1 Panel Poplar 24"
1 car 3" No. 1 Common & Better Yellow Poplar. & up.
2,000' 4" No. 1 Common & Better 2 cars 4/4 Log Run Beech.
Yellow Poplar. 10,000' 4/4 Log Run Cherry.
1 car 8/4 No. 2 Com. Buckeye. 2,500' 5/4 No. 1 Common & Bet-
ter Cherry.

All of the above is band sawed, good widths and lengths,
and we can make prompt shipment

BENNETT & WITTE

JUST A FEW OF OUR SPECIALS

1 car 4/4" No. 1 & Panel Sap 2 cars 4/4" Sd. Wrmy. & No. 2 Com.
Gum, 21" to 25". Qrtd. Chestnut.
2 cars 4/4" 1 & 2 Red Gum, 18" to 3 cars 4/4 1 & 2 Poplar.
27". 1 car each 12/4" No. 1 Com. Selects
3 cars 4/4 No. 1 Com. Qrtd. Red & 1 & 2 Poplar.
Oak. 1 car each 4/4 No. 1 Com. & 1st &
2 cars 4/4 1 & 2 Pl. Red Oak, 12" 2nds Ash.
& up. 1 car 4/4, 5/4 & 6/4 1 & 2 Ash, 12"
1 car 4/4 No. 1 Com. Qrtd. White & up wide.
Oak. 1 car 8/4", 10/4, 12/4 & 16/4" 1 & 2
1 car 12/4 1 & 2 Pl. White Oak. Ash, 12" & up wide.

Main Office
CINCINNATI, OHIO
222 W. 4th Ave.

SOUTHERN OFFICE, MEMPHIS, TENN.
EXPORT OFFICE, NEW ORLEANS, LA.

"Three Mills in Indiana" Used to Be the
Slogan. Now There's Only One Left, but It's

The Largest Band Mill in Indiana

"From Toothpicks to
Timbers 60 Feet Long"

PERRINE-ARMSTRONG COMPANY

Fort Wayne, Indiana

D. B. MacLaren Lumber Co.

HARDWOOD LUMBER

Evansville, Ind.

5 cars 4/4 No. 1 common Quartered White Oak
4 cars 4/4 No. 1 common Plain Red Oak
2 cars 4/4 No. 2 common Plain Red Oak
1 car 4/4 No. 1 common Poplar
1 car 4/4 Nos. 1 and 2 Red Gum

ANY REASONABLE OFFER

QUARTERED WHITE OAK

5,830' 3/4" 1s-2s.
10,500' 5/4" 1s-2s.
10,800' 6/4" 1s-2s.
8,000' 3/4" No. 1 Com.
20,000' 4/4" No. 1 Com., 10" & up.
57,000' 5/4" No. 1 Com.
4,080' 6/4" No. 1 Com.

45,000' 4/4" No. 2 Common.
5,390' 5/4" No. 2 Common.

PLAIN RED OAK

21,000' 4/4" No. 2 Com. Red and White.

QUARTERED RED OAK

21,000' 4/4" 1s-2s 6" & 7" wide.
10,300' 6/4" No. 1 Com.

WILL BUY THE FOLLOWING STOCK:
DRY—IN FINE CONDITION

PLAIN POPLAR

5,000' 4/4" 1s-2s Yellow, 7" & up.
30,000' 6/4" No. 1 Common.
12,000' 4/4" Clear Saps.
21,000' 6/4" Clear Saps.

QUARTERED POPLAR

16,900' 4/4" 1s-2s.
8,000' 4/4" No. 1 Common.

We, of course, have a complete stock of Quartered and Plain Oak, Poplar and Hickory, etc., in all grades
and thicknesses, and will be glad to have your inquiries for anything you may need.

J. V. STIMSON & CO.

OWENSBORO, KY.

THE EAST

BOSTON

NEW YORK

PHILADELPHIA

WM. WHITMER & SONS
INCORPORATED

Manufacturers and Wholesale-
sellers of All Kinds of

"If Anybody Can,
We Can"

HARDWOODS

West Virginia Spruce and Hemlock
Long and Short Leaf Pine Virginia Framing

Franklin Bank Bldg.

PHILADELPHIA

Willson Bros. Lumber Co.

MANUFACTURERS

WEST VIRGINIA HARDWOODS

Oliver Building

PITTSBURG, PA.

WISTAR, UNDERHILL & NIXON
REAL ESTATE TRUST BUILDING, PHILADELPHIA, PA.

QUARTERED WHITE OAK

NICE FLAKY STUFF

CHAS. K. PARRY & CO.

Hardwood Lumber

LAND TITLE BUILDING, PHILADELPHIA, PENNSYLVANIA

WE WANT 5/4 No. 1 common Red Oak 8/4 No. 1 common Red Oak
4/4 No. 2 common Red Oak Log Run Basswood

We Know How to fill your orders for all kinds of HARD-
WOODS, WHITE PINE, YELLOW PINE,
SPRUCE, HEMLOCK, CYPRESS, HARDWOOD FLOORING.
Give us a trial.

THOMAS E. COALE LUMBER COMPANY
FRANKLIN BANK BUILDING, PHILADELPHIA, PA.

WM. E. LITCHFIELD

MASON BUILDING, BOSTON, MASS.

Specialist in Hardwoods

Manufacturers are requested to supply lists of stock for sale

**PROMPT
SHIPMENT**

1 car 4/4 No. 1 Com. and Saps Poplar.
2 cars 4/4 No. 2 Com. & Better Hard Maple.
2 cars 8/4 Log Run M. C. O. Soft White Pine.
2 cars 5/4 Log Run M. C. O. Basswood.

DANIEL B. CURLL, Real Estate Trust Bldg., PHILADELPHIA

JONES HARDWOOD COMPANY

WHOLESALE DEALERS IN

HARDWOODS—Poplar and Gum

33 Broad Street,

BOSTON, MASS.

BEECHER & BARR

OAK

CHESTNUT

POPLAR

WHITE PINE, YELLOW PINE AND HEMLOCK
INTERIOR TRIM. HARDWOOD FLOORING.

442 LAND TITLE BLDG.

PHILADELPHIA, PA.

Saw Mills Designed and Built

Plans and specifications prepared. Construction supervised.
First class heavy millwright work. Entire plants surveyed. Ma-
chinery for complete mills. Fire loss adjustments. Practical
sawmill engineer. Can save you money. Highest testimonials.

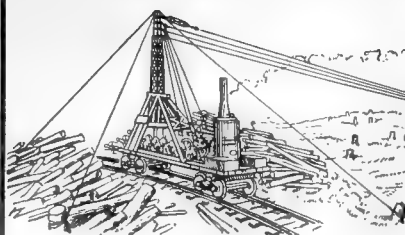
C. M. STEINMETZ,

P. O. Box 83, Washington, D. C.

The CHEAPEST HARDWOOD LOGGING

IS DONE WITH

LIDGERWOOD CABLEWAY SKIDDERS



LIDGERWOOD MFG. CO.
96 Liberty Street, New York

Branch Offices
CHICAGO SEATTLE
Agencies
NEW ORLEANS—WOODWARD, WIGHT & CO. LTD.
CANADA—ALLIS CHALMERS BULLOCK LTD.
MONTREAL VANCOUVER

THE EAST

LEADING MANUFACTURERS AND JOBBERS

W. P. Craig Lumber Co.

Wholesale Hardwood and Building Lumber

Empire Building, :: PITTSBURG, PA.

HARD MAPLE

When the quality of being hard is required in Maple, Vermont or Adirondack stock should be specified. Maple will not grow harder for us than other people, but it certainly does grow harder in this section of the country than elsewhere.

WE CAN MAKE PROMPT SHIPMENTS.

GEO. WEBSTER LUMBER CO.

New York Office
25 West 42nd St.

21 Besse Place, Springfield, Mass.

CHARLES HOLYOKE

141 MILK STREET, BOSTON, MASS.

HARDWOODS

H. D. WIGGIN 89 STATE STREET
BOSTON, MASS.
MANUFACTURER HARDWOOD LUMBER
Circular-sawed Poplar, Oak, Chestnut, Basswood, Maple
Mill at Stone Coal Junction, West Virginia

Immediate Shipment

5 cars 4/4 No. 1 Common Yellow Poplar
4 cars 4/4 No. 1 Common Oak
DRY—Good lengths and widths

J. S. KENT CO., PHILADELPHIA

PALMER & PARKER CO.
TEAK MAHOGANY EBONY
ENGLISH OAK VENEERS DOMESTIC
CIRCASSIAN WALNUT HARDWOODS
103 Medford Street, Charlestown Dist.
BOSTON, MASS.

<p>ASH 4/4, 5/4, 6/4, 8/4, 10/4, 12/4 and 14/4.</p>	<p>AMERICAN LUMBER & MFG. COMPANY Manufacturers and Wholesalers PITTSBURGH, PA.</p>	<p>POPLAR 4/4 Bay Poplar (Tupelo 1st and 2nds.)</p>
<p>MAPLE 4/4, 5/4, 6/4, 8/4, 10/4, 12/4 and 16/4.</p>	<p>HARDWOOD White and Yellow Pine</p>	<p>OAK White and Red, Quartered and plain sawed, all grades and thicknesses.</p>
<p>YELLOW POPLAR</p>	<p>We make a specialty of thick White Ash, Hard Maple and White Oak. Railroad Car and Construction Oak timbers, long lengths and special sizes.</p>	<p>CHESTNUT All grades and thicknesses.</p>
<p>All grades and thicknesses.</p>	<p>Write for prices before heavy call for Spring requirements.</p>	<p>SPRUCE All grades and thicknesses.</p>

LET us talk to you about the plain and quartered oak that made Indiana famous. It's the kind we make to-day.

Wood-Mosaic Co., New Albany, Ind.

R.E. Wood Lumber Company

- ☐ Manufacturers of Yellow Poplar, Oak, Chestnut, Hemlock and White Pine.
- ☐ We own our own stumpage and operate our own mills.
- ☐ Correspondence solicited and inquiries promptly answered.

GENERAL OFFICES:
CONTINENTAL BUILDING.

Baltimore, Maryland

YOU pay a *little* more for our hardwood lumber than you do for many others, but it's worth *much* more.

With our modern and first-class equipment and expert operatives, we couldn't make bad lumber if we tried to, because the *quality* and *size* of our virgin tough mountain white ash, red birch, yellow poplar, buckeye, maple, red oak, cherry and basswood, averaging less than three logs to the thousand, and 95 per cent sixteen feet, is the best type of hardwood timber growth in the United States, and shows a larger percentage of *firsts*.

If you are a discriminating buyer let's get acquainted.

LITTLE RIVER LUMBER COMPANY,

Townsend, Tenn.

Dry Poplar
for
Immediate
Shipment

2 cars 4/4 Fas.
2 " 4/4 Saps, Selects.
3 " 4/4 No. 1 Common.
3 " 6/4 No. 2 Common.
1 " 8/4 Fas.
2 " 8/4 Saps, Selects.
5 " 8/4 No. 1 Common.
4 " 8/4 No. 2 Common.
2 " 10/4 No. 1 Common.

FAUST BROTHERS LUMBER COMPANY

Sales Office
1319 Fisher Bldg., CHICAGO

Main Office
PADUCAH, KENTUCKY

FREIGHT OVERCHARGES

WE SPECIALIZE ON LUMBER TRAFFIC
We represent nearly every member of The Mississippi Pine Association

Our overcharge claims for one company, \$6,000.00

Let us analyze your freight accounts
Collect past and prevent future overcharges
Best references from Lumbermen from
Canada to Mexico

COST BASED ON RESULTS

Write for particulars and terms.

The American Freight Audit & Storage Co.

Incorporated
Rooms 55-8, 39 West Adams St. Chicago

**FIRE
INSURANCE**

Lumber Underwriters

66 BROADWAY
NEW YORK

E. F. PERRY, Manager.

Panel and No. 1 Poplar

5 cars 4/4" 18/23"
5 cars 4/4" 24" and up

Let Us Have Your Inquiries

RUSSE & BURGESS, Inc.

Memphis, Tennessee

OAK FLOORING

**Kiln-
Dried**

Polished



**Hollow
Backed
and
Bundled**

89%

of **HARDWOOD RECORD** subscribers are owners of steam plants. Eighty-nine per cent are, therefore, buyers of wood-working machinery. There is little percentage of waste circulation in **HARDWOOD RECORD** for machinery advertisers.



Hardwood Record



Published in the Interest of the American Hardwood Forests, the Products thereof, and Logging, Saw Mill and Wood-working Machinery, on the 10th and 25th of each Month, by

THE HARDWOOD COMPANY

Henry H. Gibson, President
Burdie Anderson, Sec'y and Treas.

Entire Seventh Floor Ellsworth Building
537 So. Dearborn Street, CHICAGO

Vol. XXXV

CHICAGO, NOVEMBER 25, 1912

No. 3



Review and Outlook



General Market Conditions

Even the elements seem to be working to the interests of the lumber business in that the long spell of fair weather has resulted in a continuance of the general building activity all over the country. As a result, this large market for all kinds of lumber has been another contributing factor to the continued shortage of hardwood stocks. With this is coupled a consistent and unusual activity in the wholesale consuming factories, most notably in the furniture trade. All lines of consuming plants, however, are either working to the limit of capacity on ordinary run or are doubling their shifts and running overtime to meet orders. While the fall rush for furniture buying seems to be on the wane, still the furniture factories will have their hands full in filling orders already on their books.

There seems to be a pretty general disposition among the large hardwood buyers to stock up as fully as is consistent when they are able to do so, and not be again caught with a shortage of dry stock which has been so serious with a number of them during the last few months.

While the car shortage continues to be a serious menace and is unabated in some sections, particularly in the South, other large markets report a slight easing of the situation. The chief trouble in shipments is on stock coming from southern mill points, particularly in the lower Mississippi valley section. While there is some scarcity of cars from all northern points, the chief trouble in this territory is the extremely broken condition of stocks.

Stock conditions in fact are entirely unimproved during the last fortnight, and buying seems to be the most important feature of the market. The opinion has been expressed that the combination of car shortage and stock will squeeze some of the smaller jobbing houses who have no first-class connections pretty closely during the coming few months. In fact, it is not at all improbable that these conditions will result disastrously in some instances.

The number of foreign buyers reported in the various exporting sections of this country would indicate that foreign importing houses are realizing the seriousness of the stock condition. There is some little disposition on the part of domestic buyers to take up large quantities of stock whenever offered in order to offset the loss of shipments through delays in cars and nonarrivals on account of inability

to secure stock. On the whole the export business, in the East particularly, seems to be in a somewhat better condition. The ocean freight rate situation is somewhat better as reported from such points as Baltimore. Most of the large lines have announced rates which, however, are so high that in most cases shippers have not contracted for 1913 on this basis, preferring to take chances on rates as prevailing at the time of individual shipments.

While, as two weeks ago, all stocks are strong but wide poplar and high grades of gum, the leaders in the market at the present time are oak, ash, chestnut, birch and maple. Considerable advances are being noted from all sections of the country on prices of both plain and quartered oak. The condition of the latter stock particularly is encouraging as furniture buyers are evincing a decidedly greater interest in it. The call for ash and chestnut in sound wormy and other grades is one of the most decided features of the present market conditions.

It seems to be the consensus of reports from important sections of the country that present conditions will prevail for a considerable time. The car shortage has seemingly reached its highest point, and while immediate relief is not probable, it is reasonable to believe that a gradual lessening in the tenseness of the situation will be felt. There will probably not be any great influx of stock to fill up the unusual shortage in the next few months.

The indications are that certain territories will purchase more stock in 1913 than they have during the past year, the consuming trade undoubtedly being well booked with orders.

That the favorable condition of the lumber market is not in any way confined to that industry is shown by reports from commercial and financial institutions in all parts of the country. Money has unquestionably been very tight for some little time, but financial reports would indicate that there will be some easing up within the next three weeks.

Prospects for 1913

Lumbermen in the United States will do well to keep themselves posted on the views of European markets on trade prospects for the immediate future. It is not necessary to give undue importance to old world opinions and predictions, for America holds a somewhat

SUBSCRIPTION TERMS: In the United States and its possessions, and Canada, \$2.00 the year; in foreign countries, \$1.00 extra postage.

In conformity with the rules of the postoffice department, subscriptions are payable in advance and in default of written orders to the contrary, are continued at our option.

Instructions for renewal, discontinuance, or change of address, should be sent one week before the date they are to go into effect. Both old and new addresses must be given.

Both display and classified advertising rates furnished upon application.

Advertising copy must be received five days in advance of publication dates.

Telephones: Harrison 8-8067-8068.

Henry H. Gibson, Editor; Hu Maxwell and Edwin W. Meeker, Associate Editors.

Entered as second-class matter May 26, 1902, at the postoffice at Chicago, Ill., under act of March 3, 1879.

independent position; yet there are shrewd traders on the other side of the sea who are close students of commercial affairs. As the present year draws to a close and 1913 approaches, lumber journals in England and elsewhere are publishing reviews of the past and prospects for the future. The consensus of opinion is that next year will show a larger volume of business in lumber transactions than any year in the past.

That opinion is based on an analysis of conditions. The year which is near its close has been satisfactory, and it leaves a good impression. Markets have been good, supply and demand have been nicely balanced, but demand in many lines is now stronger than supply. There is an abundance of raw material, but most of it must yet be manufactured before it reaches the consumer. That insured good business for the logging crews, the sawmill men, the transportation companies, the middlemen, and the ultimate user of the forest products. Yards have run low to meet increased demand, but there is plenty to fill them. There is no indication anywhere of a slump in demand. Everybody appears to believe that good business will continue, and that is the surest sign that it will continue.

European markets have refused to grow panicky over the war in the Balkans. Although nobody has had any doubt that it is real war, yet it has been generally believed that it will be localized, and that no danger to the general peace of Europe exists. That feeling has caused German, English and French traders, and traders of other nations, to plan a year of good business for 1913. The confidence exhibited on the other side of the water has had its counterpart on this side, where a presidential election and a change of administration have not shaken the confidence of business men, who are preparing to make next year one of the best in the history of this country.

The Real Object

Now that the country has had ample time to settle itself after the excitement of the presidential campaign, business men can afford themselves a little reflection upon the effect of its results upon the nation's business.

Probably every written comment upon the complexity of the national political situation this fall has contained some reference to the phenomenal and entirely unusual apathy on the part of business to the result of a presidential campaign. For the first time perhaps in the history of national politics business has demonstrated that it can entirely divorce itself from the political question and that it can maintain a uniform effort to stand on its own merits.

The real object of the business man of the country has seemed to be not to advocate or oppose any particular candidate whose election might have any particular bearing upon business itself, but to do everything possible to continue the sentiment which has prevailed all over the country that good times are with us again, and that the business man should do everything possible to estrange business from the influence of politics.

The evidence that this sentiment would prevail was seen long before the election, and it has certainly been maintained without faltering straight through the campaign, and shows no symptoms of dissipation now that the question is settled. The so-called "calamity howlers" have tried desperately to make their voices heard predicting all kinds of dire results in the election of this or that candidate. It is probable that the predictions as to the downfall of business in the

event of a Democratic election were more numerous than regarding the election of either of the other candidates, but now that a Democratic president is actually to take the presidential chair, the business man seems very much inclined to continue to devote his entire thought and effort toward maintaining the highly satisfactory condition of business throughout the country.

The business men have practically as a unit adopted the attitude toward politics which would indicate that as long as politics evince no desire to interfere with business, business will run along in its own groove with an increasing degree of activity. There doesn't seem to be any sentiment that would indicate any great anxiety. The business man seems quite ready to forget the possibility of any kind of disastrous results from the recent election until such time as the Democratic party might see fit to affect some desperate and drastic legislation. It hardly seems possible, however, that such an attempt will be made.

In considering the recent vote the fact is very apparent that the government was made Democratic entirely because of the split in the opposition, and not because of any great wave of public endorsement of the Democratic principles. Therefore, its foothold upon the national administration is not so strong but that it can very easily slip if its policies are too jarring upon the public taste. In view of the fact that Mr. Wilson's actual vote was much less than that of William Jennings Bryan in the previous election, it hardly seems possible that anything of a drastic nature will be attempted.

Business men can safely play their own game in the gallery, merely keeping an eye occasionally on affairs at Washington as a matter of patriotic pride rather than business anxiety.

An Opportunity

It is seldom that lumbermen are aligned with railroads in any fight for a cause which would result in mutual benefit or detri-

ment to these two important branches of industry. An opportunity which has just been presented to them to work together for the common good of both should be readily and enthusiastically embraced by both.

By consistent and persistent effort lumbermen operating under Western classification have been successful in maintaining on shipments from the west coast eastward, a different classification for goods packed in fiber and similar containers than those packed in wooden boxes. In other sections of the country, particularly in the East on west-bound freight and on any freight shipped between eastern points, the uniform classification on goods shipped in both types of containers has resulted in serious detriment to the box manufacturers of that territory, and hence to the producers of box material selling to eastern box manufacturers.

While Washington, Oregon and California lumbermen have in the past enjoyed the benefits of this reasonable classification, these benefits are seriously threatened at the present time by a petition which puts the issue squarely before the Interstate Commerce Commission for decision. The question is of specific importance to that territory inasmuch as the products of the forest there run extensively into the lower grades used for boxes, and the footage sold would be seriously reduced if the fiber packages were permitted to be carried under equivalent rates.

Based on an appeal from George X. Wendling of San Francisco to

UNSOLICITED TESTIMONIAL

Vestal Lumber and Mfg. Co.

Incorporated

Manufacturers of

Quartered White Oak, Plain Red and
White Oak, Poplar, Black
Walnut, Etc.

Knoxville, Tenn., Nov. 9, 1912.

HARDWOOD RECORD,
Chicago, Ill.

Gentlemen: We are enclosing you a sample of some of the letters we have received, which shows that our advertisements in your paper are widely read.

Very truly yours,

VESTAL LUMBER & MFG. CO.,

E. M. Vestal, V. P. & Sec'y.

The letter enclosed was from a leading Anvers, Belgium, dealer in American hardwoods, asking for quotations on three-eighths inch, one inch and inch-and-a-half quartered and plain white oak.—Editor.

President Griggs of the National Lumber Manufacturers' Association, the latter organization has been instrumental in getting the question before the trade as a body. It has printed in its November bulletin the entire letter from Mr. Wendling showing the status of the question and the grave menace in the petition.

The petition is instituted by the fiber box people specifically against all the western roads, and if it is decided in favor of the complainants, uniform classification on goods packed in fiber and wood boxes will be general throughout the country.

The object of the appeal to the members of the trade is a broad one and is not designed specifically for the sake of benefiting the western element. If such a petition is decided favorably to the fiber box people, it will make practically impossible any successful appeal on the part of members of the trade in other parts of the country. However, if the railroads win a favorable decision from the Interstate Commerce Commission and are allowed to continue to charge greater rates for goods in fiber packages, it will mean that the restoration of equitable rates on similar stuff will be rendered more easy in other parts of the country.

As the hearing will probably take place within sixty days it is necessary that the defendants have their petition prepared expeditiously. Therefore, the National Lumber Manufacturers' Association appeals to all lumbermen to do everything in their power to get hold of information that would tend to prove the superiority of the wooden package over the fiber package for the shipment of all classes of goods, and hence to demonstrate the equitability of charging a greater rate for goods packed in fiber containers. Such evidence would have to consist of photographs of goods which have been damaged in transit when packed in fiber and similar containers, showing specifically the injury to the containers and information as to the manner in which damage was done.

While this is the first time the box classification matter has gotten before the Interstate Commerce Commission, it appears that the decision will be final and will have a definite bearing on the entire question for all time to come. Therefore, it behooves the entire lumber trade in any way interested in the production of box material to do everything possible to assist in defeating the fiber box people in their efforts to secure uniform classification.

Proposed Freight Rate Advance

The next step of the railroads to secure increased revenue will be an increase in freight rates on hardwoods in southern territories on all lines east and west of the Mississippi river to Ohio river crossings and western territory. These roads have already checked in advances and probably the first effort will be to replace the special rate on box material of gum and cottonwood, putting these on an equal basis with other hardwood rates. The railroads claim that they are not justified in differentiating between these two different classes of hardwoods. An increase of this nature would mean that shippers of box material would have to put up with a straight advance of two cents.

It seems that it is further proposed to equalize the figures on shipments of hardwood with the rates on pine lumber from the South. The result of this movement would be an increase on all hardwood shipments of one cent. But the roads will not stop here. It seems that their policy will be then to carry box material right along with the regular line of hardwood, putting all shipments of hardwood lumber on an equal basis with pine. There would then be added to present rates on box material a straight increase of three cents.

The usual plea of "insufficient funds" is the excuse for this advance, and the railroads have stated that they will check in advances and let the Interstate Commerce Commission decide the question.

An analysis of the question, going beyond the mere controversy as to whether or not the roads are actually in need of increased revenues, brings up the query of whether there is not some deeper motive behind the advance than the mere desire to equalize rates on pine and hardwood shipments. An authority on the question recently suggested that this is but one move in a step to advance rates on lumber shipments generally. He suggested that the probable course of the railroads would be, after securing the present proposed hardwood ad-

vances, to eventually enter the old plea that hardwood and pine should not be shipped on an equal basis, but that pine should take a greater rate. This, of course, if successfully carried through, would mean that both pine and hardwood shipments would cost considerably more than at the present time figured in the same proportion.

The plea of insufficient returns from shipments from the territory in question seems at present to be particularly inappropriate in view of the tap-line decision as recently handed down by the Interstate Commerce Commission. As those familiar with the tap-line cases are undoubtedly aware, the arrangement under which these so-called "railroads" operated with the through-lines allowed them a division of through-rates on shipments of their own stock originating on tap-lines. This division was in varying proportion, but in every instance noted the tap-line companies enjoyed a very considerable percentage of the total through rate. The decision of the commission prohibiting a continuance of this practice, which it adjudged to be a form of rebate, will mean that the railroads will now be entitled to the entire freightage on such shipments rather than merely a proportion of it. This will mean a very decided increase in their revenues from this territory, and it seems reasonable to suppose that this increase should more than offset any increase in operating expenses.

However, the question is one that can not be decided off-hand by any individual or group of individuals and, judging from the many protests which have been submitted to the Interstate Commerce Commission, the railroads will have to demonstrate the justice of their claim for increased revenue pretty thoroughly if they are to be granted the increased rates.

This is merely one of the many problems which are constantly coming up to relieve the monotony of the lumberman's existence. He should find considerable interest in contributing his share to the endeavor to ascertain the right of the situation.

The Eucalyptus Game

Harry D. Tiemann, technologist of the Forest Service, has a brief article on the subject of eucalyptus in the November number of American Forestry, which endorses practically what HARDWOOD RECORD has alleged for years concerning the spurious character, as a commercial lumber proposition, of eucalyptus. This article is particularly timely right now as many promoters of the eucalyptus game are engaged in selling tracts of land in southern California to credulous investors for eucalyptus planting on such specious representations as to be practically fraudulent.

One prominent promotion company sends out a glittering prospectus from the title-page of which the following is quoted:

"Will you work and wait seven years for a pension for life? Absolutely no gamble. Not a speculation. A sure, safe investment that will average one hundred per cent annual dividends."

Mr. Tiemann's article is herewith reproduced in full:

Eucalyptus for California is a proposition worthy of hearty endorsement, but it should stand upon its own merits and not upon some fictitious attributes. Otherwise vast disappointment and losses to the hundreds of small investors who are counting upon the eucalyptus as a timber producing tree are in store. In your July number appears an interesting article upon San Diego's Municipal Forest. The statement is there made that "eucalyptus is an acceptable substitute for almost any of our American hardwoods." In the same issue there appears a news note entitled Fast Growing Eucalyptus, to which has been subjoined, apparently by the editor, a comment that "it is almost unbelievable that trees growing so rapidly produce a timber as hard and tough as hickory." Unquestionably these statements have been made in all good faith, but evidently without a first-hand knowledge of the kind of lumber which these quickly growing trees less than half a century old will produce. As this lack of understanding is very general and is likely to lead to serious consequences, I would like, Mr. Editor, with your assistance, to sound a note of warning, since I have had considerable experience in drying the wood from these trees.

While much that has been claimed as to the marvelous growth of this tree is indeed true, the rapid growing species, particularly the blue gum, *E. globulus*, which is the one of most consequence, is not to be considered a timber producing tree during its early life of thirty or forty years, for reasons about to be given. It is true that the old trees of Australia which are of great age and size produce lumber of good quality which can be seasoned and utilized as other hardwood lumber, but not so with the young trees such as are growing in California, less than forty years old. This is just where the fallacy in the arguments of the eucalyptus promoters comes in. The trees actually produce in volume of green wood

what is claimed, but only a very small portion of this is convertible into useful lumber. The main troubles with the wood are first, that the trees themselves while living contain internal stresses which cause the logs to check as soon as the tree is cut, and the boards to warp directly from the saw. Then in drying the shrinkage is not only very unequal, but it is three or four times as great as hickory, and unlike other hardwoods, it begins to shrink with the first loss of moisture as high as eighty per cent of the dry weight. Moreover the dry wood will not hold its shape well. In air drying the wood either checks badly, honeycombs, or warps, generally all three. Small specimens and occasionally a larger piece of lumber and very carefully selected material have dried successfully, but this represents so small a proportion of the standing timber that the profit is gone. In some experiments in drying this lumber in a special kiln of my own invention I have succeeded in turning out some really fine boards which will compare favorably with oak and other hardwoods, but it must be remembered that this represents selected material, and probably from less than one per cent of the standing trees, and even so less than half of the scale measure of the logs from which cut. For small articles, such as tool handles, good material can be had by selection, and some concerns in California are now manufacturing these, but the market for this material is necessarily limited and such small stock does not require a very great stumpage.

Mr. Watson in his article does not state what species he is planting at San Diego. It is possible that some of the slower growing eucalypts, the value of which for lumber has not been tried, such as *E. resinifera*, might prove good, but then on the other hand their rates of growth are so slow as to be of little or no advantage over other hardwoods.

This matter should be made very plain for the benefit of the great number of people who are investing in eucalyptus planting. For fuel, wind-breaks, and soil protection, as well as for many other purposes, the value of eucalyptus trees for California can hardly be over-estimated, but the fictitious claims which are sometimes made for the blue gum and other species as a lumber producing tree in less than half a century of growth should be refuted so clearly that "he that runs may read."

Apparently a Success

The lumbermen's mutual fire insurance companies, under which lumbermen and the woodworking plants throughout the country have been enabled for years to purchase their insurance at an absolute minimum of cost, have long since demonstrated their practicability and their ability to greatly reduce the cost of fire insurance to such concerns. This business has long since passed beyond the experimental stage, and in spite of violent and unjust opposition on the part of stock companies, has gained a prominent and increasing strong foothold in the insurance world.

The various liability laws which have gone into effect during the last year or two in different states have effected a greatly increased insurance rate. As a consequence the owners of industrial plants have revolted at the idea, in embracing such laws, of being forced to pay exorbitant insurance costs to the old companies. As a result of this workingmen's compensation legislation a number of mutual casualty companies have been started in various parts of the country. The success of none probably has been so decidedly marked as that of the recently incorporated Lumbermen's Mutual Casualty Company, organized a few weeks ago in Chicago for the benefit of Chicago lumbermen.

This concern secured the services of an able and experienced insurance man as manager, and already in the five weeks it has been in operation has secured a half million dollars more in subscriptions than the law requires for the incorporation of such a company.

If the mutual companies had no other feature to offer industrial plants than that of cheaper rates, it should certainly prove a sufficient inducement to effect the hearty support on the part of the industries which embrace it. Business men are well aware of the ridiculously high cost of securing insurance from the stock companies, which cost must necessarily be attributed to the exorbitant administrative cost of the business, including immense salaries, the maintenance of luxurious offices and similar charges, which must naturally come from the policyholders' pockets. The very fact that these costs are entirely eliminated from the mutual companies would certainly present sufficient argument in itself considering that the other features of the company are equally advantageous as those of the stock company.

That this is true is forcibly illustrated in the support which the mutual companies have received, both in fire insurance and in casualty insurance. There is undoubtedly a big and useful future for such corporations.

One Phase of Association Benefit

There are four classes of trade association members which classes are particularly distinguished between in the lumber business. They are the scoffers at association value; those who are indifferent; those who dutifully attend meetings but never do any active work, and those who furnish the entire motive power which keeps the association in its forward progress. By far the greatest number are those who are indifferent, and it is very probable that their indifference is due for the most part to their lack of effort to ascertain the possible benefits to them of association work.

The big lumber associations of the country have been created and owe their continued existence probably more to specific work which they are carrying on than to any general and less definite benefit to the trade. There are, however, a vast number of small associations made up of members of local trades which are designated as city lumber clubs and lumber exchanges, and community lumber organizations of various kinds, which have a more intimate bearing upon the lumber business probably than do the larger associations.

The active work of these smaller bodies has been confined mostly to the last few years, during which time their growth and activities have been distinctly marked. They are, of course, continually faced with various problems dealing with different phases of business transactions as encountered in the handling of the lumber business, but one of the most definite benefits derived from such association work comes not from any concerted effort on the part of the members as a body to secure this or that reform, or to combat this or that evil. It comes, on the other hand, rather from the close contact among members, which necessarily results from a local organization of the character, for instance, of the Lumbermen's Association of Chicago, the Lumbermen's Club of Memphis or Cincinnati, and similar organizations in various parts of the country.

All old-timers can recall the condition which prevailed in the old days when every man's competitor in business was carefully watched with a suspicious eye and was more or less looked upon as being naturally an evil influence in the trade, and as an individual he would do everything in his power to freeze out a man in any deal rather than work with him for the mutual benefit of both. There has been a gradual transition due to club work which has resulted in just the opposite attitude.

It is not at all uncommon under present market conditions to hear one wholesaler ring up a competitive wholesaler in his own town, call him familiarly by his first name, and open up negotiations on certain lines of stock which he believes his competitor has, and which he himself has not, which trade probably results in profit to both.

While this condition has been true ever since the good efforts of close association through local lumber organizations have been felt, it is notably true at present with the prevailing scarcity of different kinds of stock throughout the country. The wholesaler never knows when he will be placed in the embarrassing position of turning down an order from a regular customer because of his inability to secure the stock from his regular mill connections. He, however, might know of several wholesalers in his own town who could supply the stock, but under old conditions a transaction between these two men would be entirely out of the question.

Deals of this sort are being constantly put through in all the hardwood centers of the country, and the fact that the trade has acquired this state of mind is certainly a strong recommendation for a continuation of the local lumber organizations, merely because they throw the members of the trade in each town closely together, and make them intimately acquainted with each other so that they become well aware of the fact that each is an individual with his weaknesses and his good points, and usually with a vision broad enough to make him capable of appreciating that it is poor business for him to live entirely within his own shell and ignore entirely the interests and opinions of his competitors.



Pert, Pertinent and Impertinent



A BIG PROBLEM



The President-Elect: It occurs to me that possibly these Platform Builders have gotten me into the deuce of a scrape. I am pledged to reduce the cost of living, and NOT to reduce the price of items entering into the cost of living. I wish I had paid more attention to higher mathematics in my college days.

A Thanksgiving

Deepest Thanksgiving I do give,
Because I didn't chance to live
In what they call the "good old days"
Of homely fare and simple ways.

I like the days that we have now,
Instead of broom and churn and plow;
I like to have a bed with springs,
And telephones and vacuum things.

Those "good old times," so praised in song!
How *did* the women get along?
No bridge or suffrage or bead bags,
No motor cars or gladsome rags!

I'm very glad "old-fashioned cheer"
Will not be offered *me* this year;
No squash or pumpkin pie for me—
I much prefer *pâtisserie*.

I can't see how they lived at all
Without a cab or music hall;
Oh, earnestly I do thanks give
That our times are not primitive!

—Carolyn Wells in *Woman's Home Companion*.

Tramp's Compliment

"Will your dog bite us?"
"I shouldn't be surprised, miss. 'E's got a
oncommon sweet tooth."—*London Opinion*.



American Forest Trees



ONE HUNDRETH PAPER

FRASER FIR

(*Abies Fraseri* Pursh.)

The people who are acquainted with this interesting and somewhat rare tree have seen to it that it does not want for names. Some of these names are both definite and descriptive, while others are neither. Tennessee, North Carolina and West Virginia furnish the names. Within the tree's range in Tennessee and North Carolina it is often known as balsam without any qualifying word, and that is quite sufficient, for no other fir or balsam grows within its range. In the same region it is called balsam fir. That is the common name of its northern relative, but there is little likelihood of confusing the two species, for their ranges do not overlap much, if they touch at all, which they probably do not. In Tennessee the name is reversed and instead of balsam fir it is fir balsam. It is likewise known as double fir balsam, but why "double" is added to the name is not clear. Similar mystery attaches to the name "single spruce," which is applied to the balsam fir in the interior of British America. The southern Appalachian tree is called she balsam and she balsam fir. These names have no scientific basis, and they appear to have originated in a desire to distinguish this tree from the red spruce with which it is associated. The spruce is called "he balsam." Artificial names like these are not necessary to distinguish red spruce from Fraser fir, as very slight acquaintance should enable anybody to tell one from the other at sight, and to see clearly that they are not of the same species. Mountain balsam, a North Carolina name for this fir, is well taken, for it is distinctly a mountain species. The name healing balsam is given in acknowledgment of the supposed medicinal properties of the resin which collects in blisters or pockets under the bark of young trees and near the tops of old. In West Virginia, where this tree reaches the northern limits of its habitat, it is called blister pine, on account of the resin pockets. In the same region it is called stack-pole pine, because farmers who mow mountain meadows use straight, very light poles cut from this fir round which to build haystacks.

This tree is decidedly an inhabitant of the high, exposed localities, being found entirely in the upper elevations of the southern Appalachian mountains, either forming extensive pure stands or growing in the company of red spruce (*Picea rubens*), with a scattering of various stunted hardwoods, as birch, mountain ash, cherry and usually with an undergrowth of rhododendron.

Fraser fir's range extends from the high mountains of North Carolina, where it grows 6,000 feet above sea level, northward into

West Virginia, within a few miles of the Maryland line, at an altitude of 3,300 feet. The tree is not found in all regions between its northern and southern limits. Its best development is in the southern part of its range.

On the upper limits of its growth the tree presents a decidedly picturesque appearance, being gnarled and twisted and plainly showing the results of its long struggle for life and development. It is always noticeable that on the exposed side the limbs are so short as to be almost missing and on the opposite side they grow out straight and long, appearing to fly before the wind. These limbs are sometimes of as great a girth for five or six feet of their length, as any part of the main stem and have a singular look, seeming to be all out of proportion to the rest of the tree. The older trees are vested in a smooth, yellowish-gray, mossy bark, which is quite different from that of the balsam fir. The bark is thin, about one-fourth of an inch on young trunks, and half an inch near the ground on old ones. The leaves are usually half an inch long, sometimes one inch, and their lower sides are whitish, which tint is due to abundant white stomata. In that respect they resemble leaves of balsam fir and hemlock.

The cones, like those of other species of fir, stand erect on the branches, and average about two and a half inches in length. They are smoother than the cones of most pines. They mature in September. The winged seeds average one-eighth inch in length, and are fairly abundant. The Fraser fir grows as tall as balsam fir, from forty to sixty feet, and the trunk diameter is greater, being sometimes thirty inches, though half of that is nearer an average. When of pole size, that is, from five to eight inches in diameter, Fraser fir is often tall, straight and shapely. Its form, however, depends upon the situation in which it grows. If in the open, it develops a relatively short trunk and broad, pyramidal crown. This fir differs from balsam fir in its choice of situation. The

latter, though not exactly a swamp tree, prefers damp ground, while Fraser fir flourishes on slopes and mountain tops.

On the mountains of western North Carolina fir grows in mixture with red spruce. Sometimes the fir is fifty per cent of the stand, but usually it is less, and frequently not more than fifteen per cent. Few fir trees in that locality are two feet in diameter. They grow with fair rapidity in their early years, but decline in rate as age comes on. It may be observed in traveling through the stands of



FRASER FIR IN THE SOUTHERN APPALACHIAN MOUNTAINS

mixed spruce and fir among the high ranges of the southern Appalachian mountains that the proportion of spruce is much higher in old stands than in young. That is due to the greater age to which spruce lives. Trees of that species continue to stand after the firs have died of old age. On the other hand, fir outnumbers spruce in many young stands. That is because fir reproduces better than spruce, and grows with more vigor at first. In stands of second growth the fir often predominates. It depends to some extent upon the conditions under which the second growth has its start. Fir does not germinate well if the ground has been bared by fire and the humus burned. Consequently, old burns do not readily grow up in fir. The best stands occur where the natural conditions have not been much disturbed further than by removing the growth. Fortunately conditions on the summit and elevated slopes of the southern Appalachians do not favor destructive forest fires. Rain is frequent and abundant, and the shade cast by evergreen trees keeps the humus too moist for fire. To this condition is due the comparative immunity from fire of the high mountain forests of fir and spruce. Sometimes, however, fires sweep through fine stands with disastrous results. The destruction is more serious because no second forest of evergreens is likely on tracts which have been severely burned.

A report by the State Geological Survey on forest conditions in western North Carolina, issued in 1911, predicted that spruce and fir forests aggregating from 100,000 to 150,000 acres among the high mountain ranges, will become barren tracts, because of the destructive effect of fires stripping the ground of humus.

The cutters of pulpwood in the southern Appalachian mountains take Fraser fir wherever they find it, mix it with spruce, and the two woods go to market as one. Statistics show the annual cut of both, but do not give them separately. The output of spruce, including fir, south of Pennsylvania, in 1910 was 115,993 cords, equivalent to about eighty million feet, board measure. Most of it was red spruce, but some was fir, and in North Carolina probably twenty-five per cent was of that species. The total pulpwood cut in that state was 14,509 cords of the two woods combined, and probably 3,800 cords was Fraser fir.

The wood of Fraser fir is very light. An air dry sample from Roan Mountain, N. C., weighed 22.22 pounds per cubic foot. That is lighter than balsam fir, which is classed among the very light woods. It is stronger than balsam fir by twenty-five per cent. The wood is soft, compact and the bands of summerwood in the annual rings are rather broad and light colored and are not conspicuous. The medullary rays are thin but numerous. The color is light brown, the sapwood mostly white.

This wood is not of much commercial value except for pulp. It is not abundant, and it is not suited to many purposes. It is suitable for boxes, being light in weight and moderately strong; but other woods which grow in the same region are as good in all respects and are more abundant, and will be used in preference to fir for that purpose. The decrease in area on account of fires, and in quantity because of pulpwood operations, indicate that forest grown Fraser fir has seen its best days. On the other hand, the United States Forest Service has acquired tracts of land on the summits of the mountains where this species has its natural home, and the growth will be protected from fires and from destructive cutting, and there is no danger that the species will be exterminated.

It is an interesting tree. It contributes to the pleasure of tourists and campers among the southern mountains. The fragrance of its leaves and young branches add a zest to the summer camp. The traveler who is overtaken in the woods by the coming of night, prepares his bed of the boughs of this tree and of red spruce and sleeps soundly beneath an evergreen canopy. Pillows and cushions stuffed with fir needles carry memories of the mountains to distant cities.

In one respect this tree of the high mountains is like the untamed Indians who once roamed in that region: it refuses to be civilized. The tree has been planted in parks in this country and in Europe, but it does not prosper. Its form loses something of the grace and symmetry which it exhibits in its mountain home, and its life is short. Those who wish to see Fraser fir at its best must see it where nature planted it high on the southern mountains.



Some Problems in Wood Identification



There never was a time when there was greater need for experts in wood identification. With decrease in the available supply of the standard woods has come much closer utilization of all forest products and while this, on the whole, is highly to be desired, it not infrequently leads to all sorts of complications. The number of woods with which the trade is thoroughly familiar is very small compared with the number that grow and that are now finding their way to the market.

Building specifications are based upon results of very extensive tests of the standard woods and architect's plans have to take into consideration the safe working stresses of the materials to be used. If untried woods are substituted there is always the danger that they will not meet the requirements and that the resulting structure will prove unsafe.

A case in point recently came to the writer's attention. A contractor in Ontario, Canada, bought what he thought was longleaf pine timber from a southern lumber company. The material was used in the construction of a large warehouse. Eighteen months after the building was completed it collapsed, resulting in a \$100,000 loss. Inasmuch as the plans had been prepared by competent architects and standard specifications for longleaf pine had been followed, suspicion was at once aroused as to the quality of material used. To determine this point samples of the wood were sent to the United States Forest Service and the xylogists of the department found them to be not longleaf pine at all but loblolly, a considerably weaker wood.

It is not at all improbable that the loblolly pine timber could have been made to serve the builder's purpose fully as well as longleaf

had the plans been designed for the weaker wood. Having specified longleaf, however, it was extremely important for the contractor to see that material true to name was supplied. The proper time for the wood expert was before, not after, the building collapsed.

Such failures have a farther reaching effect than the immediate loss sustained. It may result in such rigid specifications, so great a margin of safety, that excessive waste of good material is occasioned. Instead of making specifications for longleaf pine, for example, of sufficient latitude to allow the use of weaker wood like loblolly, thereby adding unduly to the cost of a structure and increasing the drain on our forest resources, greater care should be exercised that no material goes into a building that is not up to specifications. To determine such things accurately requires expert knowledge of wood.

Other examples could be cited. For instance the Baldwin Locomotive Works invited bids for 30,000 window sashes, specifying white pine. One planing mill concern in the Middle West submitted figures accompanied by specimens of wood which they represented to be the best grade of sugar pine. Now sugar pine belongs to the white pine group and for most purposes is almost if not entirely as satisfactory as eastern white pine. The company was rather suspicious of the samples and enlisted the services of an expert for identification. It was then discovered that of the three specimens of so-called sugar pine submitted one was western yellow pine and two were Engelmann spruce. Perhaps they would have served the purpose fully as well, for both are good woods, but they were not as specified and their use might have given the bidders an unfair advantage over others complying strictly with the company's demands.

New York City issued bids for white pine boards, and the material delivered was determined by the U. S. Forest Service to be an inferior grade of Douglas fir. There is no wood easier for the expert to recognize than Douglas fir, whether it be the largest beam or a tiny splinter, for the tracheids of the wood are marked with tell-tale spirals which need never be mistaken. It takes a compound microscope to see them, but they are always there and no other commercial wood (except yew, which is seldom on the market) has them.

A company bought a shipment of laths supposed to be white pine, and it was considered so important that the stock be true to name that an expert opinion was obtained. Of one hundred specimen laths examined seventy-eight were balsam fir and twenty-two red spruce. These woods look considerably alike to the average user, but the xylogist knows just where to look for the points of distinction. White pine has abundant resin ducts visible to the unaided eye—balsam has none at all, and spruce has comparatively few and small ones at that. Under the microscope there are more important differences which only the expert can appreciate. For instance, the rays of white pine and spruce have ray tracheids while balsam has none; the pits in the lateral walls of the ray parenchyma cells are few, simple and large, in spruce they are several, semi-bordered and numerous. These and other features fix the status of the specimen as a white pine, a spruce or a fir, though sometimes it is necessary to know what part of the country the material came from in order to get the exact species.

In a certain southern home is an expensive banister and no small item in the bill for its construction was for snake wood. In this case "snake wood" was another name for a curly specimen of our native yellow birch.

A certain large office in Chicago is finished with what the owners fully believe is expensive Circassian walnut. Somewhere in Arkansas some red gum stumps are still standing from which this native wood with a foreign look was cut. What's in a name? In this case a big fraud, for the owners paid well for something they never received. The substitution could readily have been detected, for red gum has entirely different structure from walnut of any kind; it is only in the coloring that there is a resemblance. Examine the end of a piece of red gum; a hand lens is required to make out the minute pores, scattered profusely throughout the growth ring. In Circassian walnut the pores are much fewer, large enough to be seen with the unaided eye, and collected in an irregular row at the inner edge of each ring. Mahogany may be distinguished from birch in exactly the same way, having comparatively few, large, scattered pores instead of a large number of very small ones diffused throughout the entire growth ring, as in birch.

About fifty different woods now masquerade in the market as mahogany. Not a few of them are beautiful and under their own names should be welcomed by the furniture trade, but it is not fair that a fictitious value be given them by appropriating the name mahogany. Crabwood (*Carapa*) from British Guiana is at the present time the principal substitute employed by furniture makers. A great many woods come from Africa to claim their share of the mahogany patronage.

There seems to be an impression in many places that things of foreign origin are better than domestic. The wood of a big tree of California was sold recently to a New Jersey manufacturer as a South American cedar suitable for lead pencil stock. Telegraph insulator pins made from so-called Kalkeen wood, reported to have come from the South Sea Islands, proved to be our native rock elm. When it becomes generally known that such sharp practices can readily be detected the buyer will be in a position to protect himself, and the seller will need to be more cautious.

One enterprising firm attempted to dispose of a large quantity of ordinary red cedar shavings from local pencil factories. The material was given the name "Cedar of Lebanon" and placed on the market as a household remedy for moths and other troublesome insects. Evidently the promoters thought all cedar chips looked alike, and so they may to the casual observer, but not so to the critical scientists of the government who are on the alert for the

misbranding of drugs. An agent of the Bureau of Chemistry submitted samples of this "Cedar of Lebanon" to a xylogist and not long afterward the company in question changed the name of its insect panacea. Unfortunately the pure food and drugs act does not apply to all forest products.

Importers of dyewoods and extract woods are often the victims of substitutions and adulterations. When wood or bark is ground into fine particles it is by no means a simple task to determine the exact nature of the original material. Here again is work for the microscope and what it reveals depends upon the experience and ability of the man behind it. By carefully examining the individual cells, noting their size, the thickness and sculpturing of their walls, etc., it is usually possible to identify a material with a fair degree of certainty. If chips are large enough to show the characteristic arrangement of the elements, the task is comparatively easy. About the most unsatisfactory trick of all is to identify the material that has entered into the composition of chemical wood pulp. With incrustating substances dissolved out and the cells separated and torn, the job is often hopeless.

A very interesting problem was recently submitted to the Forest Service by one of the largest collar manufacturing concerns in the country. This company was constantly annoyed by the appearance on and in the laundered collars of small specks, little lumps, shiny patches and flecks for which its experts were unable to account. The manager appealed to the dendrologist for assistance, sending samples of the collars in various stages of manufacture, as well as over a thousand of the troublesome specks carefully removed and pasted on a sheet of paper. It may seem a far cry from the making of collars to the study of trees and woods but results proved that the manufacturer had gone to the right place.

Under the compound microscope the offending particles were revealed to the experts as bits of animal hair, wool, cotton, wood, outer covering of the flax and various other things. A few of the faults were in the flax fibre and in weaving the collar fabric, but most of the substances became attached to the fabric during the process of manufacture and laundering. The unfinished collar material failed to show as large a percentage of inside and outside faults as was found in the finished collars. This was due to the fact that the washing, drying and starching gave opportunities for other fault specks to be added. In some cases specks became visible only after the collars had been ironed, the color being brought out by the heat.

As a result of the dendrologist's report the manufacturer has instituted more critical inspection of the collar material not only in the different stages of manufacture but also in the various processes of washing, starching, ironing, and conveying from one place to another of these operations. It was found that prevention of contact with all sorts of fault materials is possible by providing absolutely clean conditions during cutting, carrying, sewing, and the other operations.

The introduction of outside faults was laid at the door of the laundries. An inspection revealed a certain amount of carelessness in washing, starching and ironing of collars, cuffs and shirt fronts which resulted in the accumulation of fault specks. Open-carrying vehicles, wood-lined washing machines, and open vibrators are the principal sources of trouble. Wood-lined machines are bound to impart bits of wood to articles cleansed in them, for the less dense fibres of the spring growth of wood are constantly being worn off. The use of metal lined washers would eliminate this trouble.

In order to re-establish a boundary line of some property in New Jersey it was desirable to locate a certain witness tree which the surveyor's notes called for. The tree was a birch. As a result of random lines a nob of a stump was found where the birch tree was supposed to have stood. The wood, however, was so old and blackened that its structure was not readily visible and besides, root wood has a somewhat different structure from that of the trunk. A small specimen no bigger than a pea was submitted to the writer for identification. The first step was to place it in water and boil it to remove impurities, soften the tissue and expel the air. A thin section was then cut with a microtome and placed under a micro-

scope. One glance was enough to tell that it was not birch, for here were rows of large thick-walled open pores which are never found in birch. The presence of a very broad ray proved it to be oak and the character of the pores and other features referred it unerringly to the black or red oak group, though the exact species could not be determined.

Sometimes holly is made into rulers and similar articles and sold as boxwood. Under the microscope, however, holly is more distinctive among hardwoods than Douglas fir among softwoods, for its wood fibers are marked with spirals. Yellow poplar and cucumber often look very much alike but are distinguished by the markings on their vessel walls—being ladder-like or scalariform in cucumber and ordinary bordered pits in the other. Basswood can be distinguished from the sapwood of yellow poplar by the presence in the former of tangential lines of wood parenchyma as well as by indistinct cross-markings on longitudinal surface due to the wood elements (except rays) being in storied arrangement. The tiniest shaving of birch can

be told from maple by the fact that under the microscope the vessel perforations of the former are seen to be crossed with bars (scalariform) while in the latter they are simple. Willow can be told from cottonwood by the fact that the marginal ray cells are irregular and different from the rest of the ray cells, while in cottonwood they are all alike and elongated in one direction. Hackberry can be separated from elm in exactly the same manner.

It should not be inferred from these examples that it is possible in all cases to identify a wood specifically. Often the best one can do at present is to name a group to which it belongs. This is largely true of the oaks, hard pines, cottonwoods, and willows. Even in the important case of the southern pines no one constant feature of distinction has been found, but one must rely instead upon a number of characteristics taken together, and all too often these are insufficient for absolute certainty. The art of wood identification is in its infancy, but with increased interest in the subject, a great many present uncertainties will be cleared up.

Balsa Wood of Commerce

Balsa, guano, corkwood, and down tree are different names applied to a soft-wooded tree botanically known as *Ochroma lagopus* of the sterculiaceae family of plants. The tree often attains a height of from sixty to seventy feet, and sometimes a diameter of two feet. Balsa is the name of a raft or float in tropical America, which the natives construct out of this wood, and the tree, therefore, came to be called balsa. It is called guano or down tree because in Porto Rico it is one of the most important economic trees, for the cotton surrounding its seeds is the "guano" or "down" with which nearly all of the natives' pillows and cushions are stuffed. In the American markets corkwood is the name most generally applied to this wood, because it is as light as cork and often used for the same purposes.

Balsa is a very common tree, particularly along the sea shores in the West Indies and Central America. It is a commercial tree in Porto Rico, especially on the edge of mangrove swamps or in other inaccessible locations, often growing with its roots in contact with salt water. While it demands a damp soil, it frequently grows well in the poorer soils in the hills away from the sea shore. The tree has many of the characteristics of the ceiba or silk-cotton tree (*Eriodendron anfractuosum*) so common in the landscape of tropical America. The balsa is a much smaller tree, however, than the ceiba, and its distribution is restricted to tropical America. The ceiba tree is known within the tropics all around the world.

Balsa makes a very rapid growth and has striking foliage and magnolia-like flowers. The fruit consists of a five-celled capsule about six inches in length and about one inch in diameter. As soon as these pods are ripe, the cells split open longitudinally and the seeds with their silk cotton protrude and spread over the whole surface, giving the appearance of a hare's foot. This characteristic is alluded to in the specific name *lagopus*, which signifies hare's foot. The chestnut brown fiber which surrounds the seeds of this tree is gathered and packed into bales and sold at a few cents per pound. It is readily removed from the capsules, but it is almost impossible to free it entirely from the seeds. This silk cotton is said to be very valuable as a stuffing material. It keeps free from insects and does not wad to the same extent as pure cotton, and is used extensively for making pillows and mattresses, and to a smaller extent for making garments. The bark also yields a fiber which may become a staple product for rope-making. The bark is used locally for the tannin it contains, and both the bark and root are used medicinally.

The wood is nearly white or slightly tinted with red, showing practically no distinction between heart-wood and sap-wood. It has a silky texture, is rather coarse but straight-grained, and is the lightest of all woods—even lighter than true cork. A sample of balsa from Trinidad exhibited at Philadelphia in 1876 had a specific gravity of .120, or about seven and one-half pounds per cubic foot. Wiesner, a German authority, gives the specific gravity of this wood to be .250. Individual variability and the difficulties of determining

the specific gravity of so porous and absorbent a wood as this make it unwise to accept either one of these figures as invariable. Cork-oak bark (*Quercus suber*) has a specific weight of .240, but it appears that some samples of corkwood are considerably lighter than commercial cork, which is markedly lighter than any other wood, with the exception of the wood of a small and unimportant tree (*Herminiera elaphroxylon*) growing in Central and East Africa.

The reason for this extreme lightness of the corkwood is to be looked for in connection with its structure and the softness of its tissue, which is easily compressible under the thumb-nail. It is very fibrous and often exceedingly difficult to work because of the fibers that impede the action of the tools. Balsa is commonly employed as a substitute for cork, both for stopping bottles and for floats of fishing nets. In Trinidad and other places it forms an article of commerce with fishermen, who use it in place of true cork on their nets. It has served only to a very limited extent for stopping bottles, since the high elasticity, impermeability and resistance to decay, so characteristic of true cork, are not possessed by this wood.

The very buoyant rafts or balsas, the unsinkable properties of which caused such surprise among the discoverers of America, are likewise made of it. The Indians used it to make their canoes buoyant, and it was at one time considered very desirable for pontoons for dry docks. The wood has been experimented with and found suitable for making life preservers. For this purpose the wood must be heated with paraffin, which, together with other expenses in preparing it, renders the cost of the material equal to that of the regular cork. In an untreated state the wood is not very durable.

Balsa is imported into the United States from Cuba, Porto Rico and Trinidad. A good many logs go to England, chiefly from Trinidad. It is claimed by dealers that the bulk of balsa wood comes from Ecuador and Peru in the form of logs from sixteen to thirty inches in diameter and from ten to twenty feet in length. The wood is sold at prices ranging from forty to sixty cents per cubic foot. It is doubtful, however, whether the species from Ecuador and Peru is the same as that growing in the West Indies. Some writers claim that the wood from South America is *Ochroma piscatoria*, but this cannot now be definitely determined. An examination of the woods alone, however, indicates that they are from two distinct trees. The West Indian kind is lighter in weight and color and has less pronounced pith-rays.

The annual rings of growth, though nearly invisible to the naked eye, are evident on an examination of the wood under the hand lens, being partly caused by the occurrence of a broken line of slightly larger pores at the beginning of the year's growth. The pith-rays are quite conspicuous on a smooth transverse section; they are also plainly visible on the radial surface, and give figure to the wood, resembling the character of beech or sycamore, only in balsa they are more numerous.

Veneer Manufacturer as a Lumberman

One of the reasons why papers like *Hardwood Record* are popular in the veneer trade is because manufacturers of thin stock have realized that the division between their industry and the lumber business generally is more or less arbitrary and more or less shifting. They know that to be the best possible veneer manufacturers, they must know something about the lumber trade.

Not only does this appear in connection with the building up of material and the production of panels and other products of the glue-room, where it is almost essential that the manufacturer have an eye on the quotations on various classes of lumber suitable for core-stock, which in itself is a proposition not to be dismissed lightly, but the manufacture of veneers proper likewise involves, or should involve, rather accurate study of the lumber market.

An instance of the desirability of this kind of knowledge is occasionally found in a negative way; that is, veneer mills are found to be piling up on their yards material which is the by-product, or offal, or whatever you may care to term it, of the veneer saw and slicer, and which ought to be thoroughly good, salable lumber. But it isn't. The reason is found in the fact that lumber requirements are disregarded, and only the veneer situation is held in mind.

Suppose sawed quartered oak veneers are being cut. The tendency of the sawyer, unless otherwise instructed, is to take off as many veneers as he can get out of the particular flitch which he is sawing. The result of this practice is that the thickness of the back-board which is taken off the dogs when the capacity of the flitch is exhausted, as far as veneers are concerned, varies constantly. This one may be three-eighths of an inch thick, the next half an inch, while the next may, because of some defect that develops, retain a thickness five-eighths of an inch. The sawyer has done his duty, because he has produced as much sawed veneer as he could.

What happens then? Why, the veneer man looks around for a buyer for his back-boards. He finds some difficulty in selling them, as a rule, for though he may advise prospective customers that they are close to half an inch in thickness, as a rule, a purchaser who takes a carload of that material and then discovers that all sorts of dimensions are to be found in the lot usually decides not to take a chance on the material next time.

Assuming that the boards are sorted properly as to dimensions, the difficulty comes in accumulating a carload of each size. The necessity of carrying the lumber on the yard for the months required to get together 15,000 feet of one thickness means that much of the profit out of the sale that is finally made is lost before it is consummated.

As a matter of fact, few veneer men give much attention to their lumber accumulations anyway as far as selling is concerned. It piles up so slowly that its importance is seldom sufficiently realized. That is how it happens that yards are found to be filled with stacks of aged lumber which would have been moved long before, but consisting of such odds and ends of stock that there is little opportunity to dispose of it.

Practice, as well as study of the market requirements, shows that the manufacturer of thin stock is wisest who insists that every back-board taken off his saw and slicer shall be five eighths inch thick. There are several reasons for doing this. To make it three-quarters inch is not so good a plan, because another sheet of veneer could very readily be secured, in most cases, from the flitch. The point is to find the happy medium between making it too thin for use in the lumber market, and not so thick that much value, from a veneer standpoint, is allowed to remain.

Lumber that is five-eighths of an inch thick combines these qualities. Only one or two more veneers could be cut, at the most, and in many cases this is the right place to stop, looking at it purely as a veneer manufacturing operation. But when the utility of the board is considered as a lumber proposition the advantages of the plan are numerous. Not only is five-eighths lumber more readily salable, since most buyers want lumber that will dress to half an inch, but it is also worth more. Half-inch stock is not so easy to sell, and is worth

less; so even counting in the money the manufacturer got for the veneer which was cut off the flitch, the difference is in favor of the board that was permitted to remain five-eighths inch thick.

The point to bear in mind principally, though, is to have them all of the same thickness, and not to leave this matter, which is such a vital point in disposing of the back-boards, to chance. When a standard, easily sold thickness, like five-eighths inch, is produced right along, the veneer man gets the "salvage" out of his flitches quickly and with little effort, thus being enabled to put back as much of his capital as possible into additional material for veneers, instead of tying up a lot of money in lumber that nobody wants.

When random thicknesses are produced, the veneer man usually had to sell the material simply as back-boards, and at a lower figure than lumber would bring; while the veneer manufacturer who is careful enough to take advantage of the preponderance of the demand in favor of five-eighths inch can sell his stock for lumber and at regular quartered oak prices, without any apologies as to the origin of the material. It will stand on its own bottom and talk for itself.

Reference was made above to the need of studying the lumber market in order to be in a position to handle the corestock problem to the best advantage. This has been a feature of special importance during the past year, on account of the numerous shifts in the lumber market. With prices going up and down and demand for various woods varying, the panel man who knew how to buy not only the lumber that was best suited for use in cores, but also that which could be had at the most favorable price, had an opportunity to make some money entirely apart from the usual manufacturing profit.

Simply buying the same material month after month and year after year, without considering differences in price or any other market features, is to overlook a bet of considerable importance, and while no panel man has the time to devote to the study of the lumber situation that one engaged in that business exclusively can give, he ought to take time enough to get in touch with essential features like that.

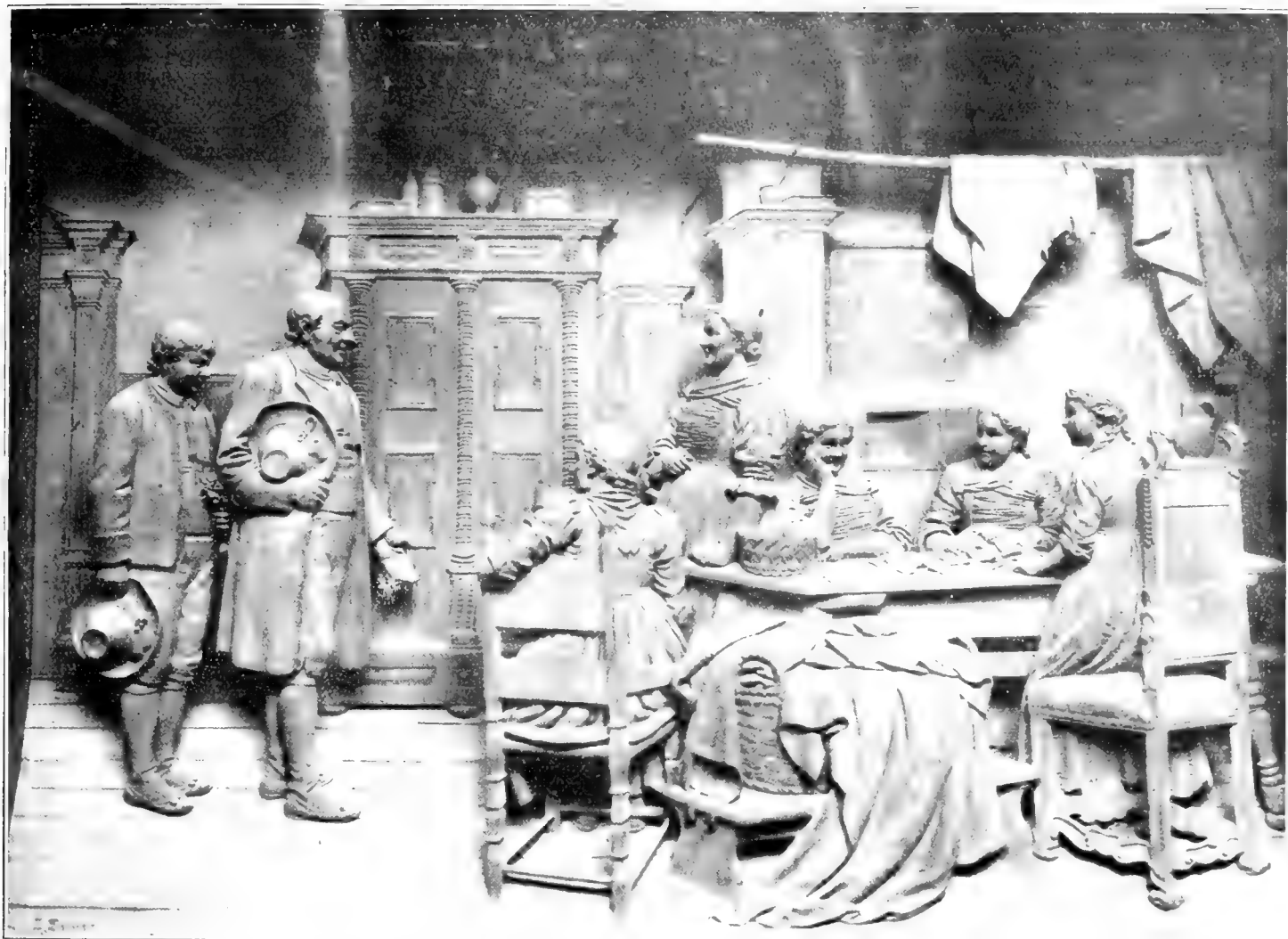
The manufacture of veneers and panels is a specialty, and is getting more so all the time; but, after all, it is only a department of the lumber business, and members of the trade ought to regard themselves as lumbermen to the extent of keeping advised of what is going on in that broad field, instead of shutting themselves up in the seclusion of their own corner of the trade. G. D. C., Jr.

Common Oak Cellar Frames

As an incident illustrating the growing use of hardwood in planing mill work, it was noticed recently that a planing mill man was making quite a lot of oak cellar frames. He had used two-inch stock, and in running it had put some fancy beading on the edge so that it looked like a special job.

Inquiry, however, established the fact that it was not special work, but that the millman had found that he could buy common oak cheaper than some of the high-grade poplar, pine and cypress he had been using. He immediately seized upon the idea of making these cellar frames of oak. The builders like them better, and as they are ultimately covered with paint, sound knots and similar defects do not amount to anything. Oak, of course, is a stronger wood and seems to make a more durable as well as a better frame.

Of course, the demand of one planing mill using oak for this purpose is not much of an item in the trade, but if oak manufacturers could prevail upon all the planing mill men within their territory to adopt this wood in making such frames, the aggregate increase in oak consumption would be considerable. This is but a little incident showing how hardwood is winning its way into new fields right along, but nevertheless an incident indicating that its progress would be much more rapid if it were persistently and consistently pushed. In this instance it was its own booster. How much more might be accomplished if the makers of oak lumber would do more boosting in the same line.



A REMARKABLE CARVING



Artistic Wood Carving



Mr. and Mrs. C. L. Willey of 4750 Grand boulevard, Chicago, who returned recently from a tour abroad, brought with them as artistic a piece of wood carving as can be found anywhere. It is cut in a block of pear wood, thirty inches long, eighteen inches wide, and four inches thick. It was purchased in Luzerne, Switzerland. The accompanying reproduction of the carving is as accurate as can be made on a flat surface. The picture brought out by the carver's skill tells its own story. There is room, however, for individual interpretation. It is evident to anyone that the dignified old gentleman has brought his bashful son to ask for the hand of one of the three charming young ladies, but which one? They understand the purpose of the visit, but is it clear to them which one is to be chosen? Does the expression on the face of any one of them tell the story? How far has the negotiation progressed at the moment caught by the artist for his picture? There is room for difference of opinion on several points, but none as to the excellence of the art displayed.

An artist will find all he wants to know in this picture itself, but the woodworker is interested in certain things which cannot be found out from an inspection of the carving alone. For instance, why was pearwood selected for the carving? There are a few other woods which may answer as well, as far as grain and texture are concerned. Ebony and boxwood might do it, but ebony is very black, and it is doubtful if it would have afforded means of bringing out the high lights and the shadows which add so much to this picture; and boxwood is light

in color, and the deep shadows might have been impossible if it had been used. Besides, it would be almost impossible, if the whole world were searched, to find a piece of perfect boxwood as large as that employed for this work by the Luzerne carver. The well-known Chinese blackwood is employed for some of the finest carved furniture in the Orient, but it is good for form, and not for feature, because it changes color too much with age. "Features" which the carver puts into figures might not remain after a complete change in color had taken place.

But pearwood remains as it is finished. It is rich in tone and fine in texture. The most minute details can be worked out, provided the carver possesses the skill to do it; and in the present instance there is no question as to his skill. It is, therefore, of interest to say a word regarding the man who did the work—E. Zeiner of Luzerne, Switzerland. He is ninety years old, and puts into his work a richness of experience possessed by few. This carving represents six months of labor. The old man makes two carvings a year—not duplicates, of course, but each original. Although he long ago passed the stipulated three score and ten allotted to the life of man, he has planned two more carvings, and is at work on them.

Mr. Willey is to be congratulated on his acquisition. He is a manufacturer of fancy woods and veneers and knows what fine pieces are worth. He and Mrs. Willey have decorated and furnished their beautiful home with works of art which they have col-

lected from various sources during their extensive travels in countries beyond the sea.

Reverting again to the carving, as shown in the accompanying

picture, it should be stated (because the picture does not bring out that point) that it all is in one solid piece, except a small peg which fastens the pole to the post in the top center of the carving.



About Concealed Cross-Banding



"Well, I wonder what they'll ask for next," rumbled the veteran panel man, as he gave a second look at the letter of inquiry that had just arrived in the afternoon mail. "It's beginning to look as if the consumer who hasn't got a special kink of his own he wants carried out in the manufacture of built-up stock is the exception, and that buying stuff made in the regulation way, the kind we have always used, has become tabooed."

"What's up?" inquired the observer who happened to be in the office at that moment.

"Why," returned the panel expert, tossing the letter with some feeling into the farthest corner of his battered old roll-top desk, "nothing's up except the price on the kind of goods that particular customer wants. Instead of taking the stock the way he's been getting it for years, he wants a new idea rung in. He doesn't stop to think that it may be much more expensive to do the thing he has in mind, but he takes it for granted that it can be done without difficulty and that it will not make any difference in the price. But he's certainly mistaken there. I'll put my little cost system to work, find out exactly what the additional labor will amount to, and then add it to the standard quotations on the material he wants. Maybe that will bring him around."

"Out with it," commented the other. "Don't talk in a circle, like the campaign orators, getting all red in the face without making a single fact clear. What's the row about? What does the consumer want that he shouldn't get?"

"Just this," said the manufacturer of built-up stock. "He wants the cross-banding of his veneered work concealed. He thinks that the consumer will have his feelings hurt if he should take a squint at the edge of his wooden bed—which, by the way, is getting back into action—and discover evidence of the veneering in the cross-banding. He has been having the corestock concealed by a band of wood similar to that of which the face is made, and he is carrying the idea one step further and trying to have the cross-banding eliminated, as far as visibility is concerned. He seems to think that it is a simple matter, too."

"Well, isn't it?" inquired the visitor. "It looks to me as if it would be a good idea to make built-up stock so good, and construct it so cleverly, that nobody could tell without very minute examination indeed that it was not made of solid material. It may seem like painting the lily or perfuming the rose to go to the trouble, but wouldn't it make the veneered proposition just that much stronger when it came into competition with the other kind?"

"That isn't the question, my boy," responded the panel man. "If we had to conceal the cross-banding in order to bring the veneered work up alongside of solid, of course we'd do it. But as a matter of fact it isn't necessary. After the finishing materials are applied, it is next to impossible to differentiate between the materials, and when you have the corestock taken care of there isn't much use fooling around trying to put the edge of the cross-banding one-sixteenth of an inch out of sight."

"It's a good idea to make the edge look like the face, and in the case of a bed, where the sides are placed so that the edges are exposed, it's particularly good. But the device of banding the core is sufficient to take care of the main difficulty, and it's going a good deal too far, in my opinion, to try to treat the cross-banding in the same way. Of course, if the consumer wants it handled that way, and is willing to pay the additional expense, all right; but here is a typical example of the way things run, for the buyer wants the work done the new way, but he wants to get the advantage of the old price."

Furniture men say that the concealed cross-banding stunt is one

of the best little tricks in their repertoire just now, as far as laying veneers is concerned. It is particularly popular with the wooden bed people, who are taking hold of the advancing popularity of their line with a vim, and are determined to make wooden beds so good as to design and construction that the brass bed will never have a place hereafter, except up in the attic or down in the basement. One of the things that they think is necessary in accomplishing this result is to complete the effort to conceal the inferior woods used in the building up of the panel by covering all of them with the band of material which now goes around the corestock only.

This is somewhat more difficult and naturally more expensive. The way the proposition is usually handled is to rim the core, which is, say, of basswood, with oak, in case an oak face is to be used, and then lay the cross-banding and the face veneers on top of that. The veneering is thus accomplished at one operation. In the plan which has been suggested it would be necessary to lay the cross-banding over the core proper; then, after permitting it to dry out thoroughly, to band the core, with its covering of cross veneers, with the solid rim of oak. After that, in order to be sure of having a smooth finish, it would have to be sanded carefully, the face veneers being laid and dried out before the stock is shipped.

This means that the gluing up is divided into two operations instead of one, with a consequent expense for labor, not to mention the additional time required for drying. It is a somewhat harder job, and certainly costs a good deal more. The question is, is the game worth the candle? Panel men who are asked to do the work without adding materially to the prices they charge insist that it isn't and point out that the presence of the edge of cross-banding is such a minor point that not one consumer in a thousand would object to it, or even notice it; while the bed manufacturer, on the other hand, makes the point that the bed which goes on the market as a mahogany or oak proposition ought to show nothing except one of those materials, and that it is an offense to the art of veneering to say that it is not worth while to do the thing in the best possible way.

There are certain kinds of veneered piano stock in which the edges are more or less exposed, but in most cases there has been no objection to the cross-banding being visible. The piano is considered a pretty high-grade proposition, and it looks, say those who object to the new wrinkle, as if the piano manufacturers would be the first to demand anything that was really necessary in this direction. The fact that they do not, it is suggested, is an argument in favor of letting well enough alone, and being content to treat the exposed edge question by the sufficiently satisfactory plan of banding the core, without worrying about the minute edge of the cross-banding veneer which happens to be exposed.

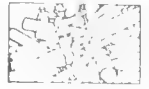
The question will probably be debated for some time longer, and if the consumers of glued-up stock come to the conclusion that they really need the material made in the new way, with the cross-banding concealed, it is probable that they will agree on a price for the work. Otherwise they may be content to take it as they have been getting it, and pay the prices which they have been quoted on this character of material by the panel factories.

Freight Car Statistics

The report on available supply of freight cars as compiled by the American Railroad Association, November 7, shows little change in the last two weeks. The total surplus has increased in this time by 2,608 cars and the aggregate shortage has increased by 3,886 cars. The total shortages reported November 7 came to 71,156 cars. Continued fair weather in the Northwest facilitating the movement of grain should do much to relieve the situation.



Primitive Lumbering Methods



The war in the Balkans is now attracting attention to that quarter of Europe. In the barren land of Herzegovina efforts for some years have been directed to reforestation, in order to save the country from becoming a desert. The Venetians and Romans once drew supplies of timber from that region, but now there is little left. In many places bare mountains of stone occupy regions of former forests; but the

admitted, as they do not reach the tops of the young trees, and finally the goat is admitted. The shrubbery is then high enough to care for itself.

Parallel plots of these reserves are laid out over the province, so that when one is entirely reserve, in the next there are sheep, while its neighbor still further on has sheep and cows, and in the fourth sheep, cows and goats graze together. Each year the peasants find that the previous reserve will be ready for sheep and the other areas each advance one stage, so that eventually the entire barren Herzegovina will be fertile and green.

They have very strict forestry laws in this region and violations are subject to imprisonment. Instead of jailing the men, however, they are set to gathering seeds, and later they are put to sowing them. Consequently, if but one wild seed in five hundred thrives the venture still pays. It costs the government nothing, and the produce of the work of that one seed will help spread the good work indefinitely.

In the north of the Herzegovina there is still some primeval forest remaining and it is now being made productive by cautious forestry. Interesting folk are the lumbermen there. Women work at these labors as well as men and wages are from twenty-eight to forty cents a day, but those of unusual ability may draw ninety cents. The lumbermen's homes are small cabins with peaked wood or thatch

roofs. Sawmills are as primitive as it is possible for them to be and are run by water power. Instead of hauling lumber on wagons, it is sent to market on the backs of horses, though the roads of the region are generally good.

F. J. K.

Building Wooden Cars

A news dispatch from Seattle, stating that within the past ten days 100,000,000 feet of lumber was purchased in Washington and Oregon by car companies, does not indicate that the steel car is driving wood out of car shops. The purchase of the above lumber was



A "TRAINLOAD" OF LUMBER GOING TO MARKET IN HERZEGOVINA

people are planting trees and trying to make them grow.

One of the commonest methods is to blast with dynamite holes for the trees, then carry soil to the pit and create a forest reserve. Frequently what appears from the road as a mere slope of rock is covered and edged with signs prohibiting pasturage in the area. On the sly, however, and quite frequently from mere laziness or spite, the peasant will drive his goats into this area and then, when he is fined heavily for the destruction, he becomes an opponent of the government.

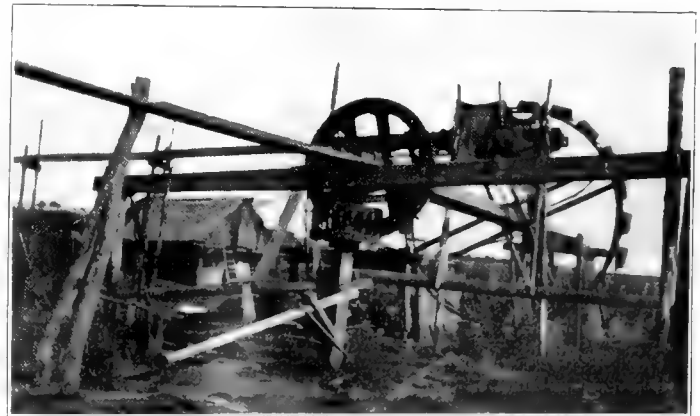
If these plants thrive at the outset, it is judged that it will pay to plant further in the locality. Some places have become covered by green vegetation in two years and are held as reserves to the end of the third year, when they have become partly forested.

The goat is the predominating factor in the lives of these people. A goat ranges in value from \$4.80 to \$5.60, and a man's wealth is frequently expressed in terms of goats. The state, on the other hand, is trying to suppress the goats, as they destroy the vegetation, while the people who care nothing about reforesting the mountains for the benefit of future generations raise the cry that the goat is everything to the people of today. Their praises of the goat are well founded. What the reindeer is to the Eskimo so is the goat to the Herzegovinian. Hide and hair, meat, milk, horns—all are utilized. Then, too, the goat is hardy and hunts its own food, so the people ask what good the vegetation will do if no animal is permitted to eat it, and why prefer trees to goats, since the goat is able to skirmish for his own living. In deference to public sentiment the goat tax has been made very low and is regulated by the number of animals a man may possess, in direct proportion. A peasant who has but ten goats pays eight cents a head, while he whose herd is a hundred strong must pay more per capita.

No grazing is permitted at first on newly planted mountain slopes. Sheep are the first animals to be admitted to these new pastures, as they do not rise on their hind legs to devour the growing tops of plants. Then the year after opening to the sheep the cattle are



RESULT OF REFORESTATION AMONG THE FOOTHILLS OF THE BALKAN MOUNTAINS



A REPRESENTATIVE SAWMILL AMONG THE WESTERN BALKAN MOUNTAINS

reported to have been made by three companies, the Canadian Car and Foundry Company, the American Car and Foundry Company and the Pullman Company.

It is to be noted that this large purchase was made on the Pacific coast, and it consists wholly of soft woods, though the exact species are not reported.



The Wood of the Birches



There are twenty eight or thirty species of birches now recognized in the world, thirteen of which are found in America. Ten of the latter are trees but only six of them are of commercial importance. The birch tree is widely distributed from the Arctic circle to Texas in the new world, and to southern Europe, the Himalayas, China and Japan in the old world, some species forming great forests at the north, or covering high mountain slopes. A very common shade tree in the eastern part of this country is the exotic species of white birch (*Betula alba*), and a varietal form with slender drooping branches and cut leaves. The six native species of chief importance are sweet, black or cherry birch, yellow birch, paper or canoe birch, gray or white birch, river or red birch, and western birch.

The following table will afford a fair idea of the sizes of the mature trees and the average weights and densities of their woods:

Common Name	Average diam., ft.	Maximum diam., ft.	Average height, ft.	Maximum height, ft.	Weight per cu. ft.	Specific gravity
Sweet	12	5	70	100	47	.76
Yellow	12	4	75	100	41	.66
Paper	12	3	60	85	37	.60
Gray	1	2	30	60	36	.58
River	2	3	70	90	36	.58
Western	3	6	85	120	38	.61

The wood of the birches has very numerous small pores scattered throughout the growth ring, though somewhat less abundant in the summerwood than in that formed earlier in the season; they are mostly indistinct without a lens. There are no conspicuously broad rays, such as found in sycamore and beech, but in sweet and yellow birch some of them are large enough to show quite plainly on quarter-sawn material. The wood, on the whole, is straight-grained, splits without difficulty and is easy to work. There is considerable variation in color between different species, sweet and yellow birch having rather dark heartwood; paper, gray and western very light colored or almost white; and the river birch somewhat intermediate. In the white birches it is very common to find abundant small brown patches (cross section) or stripes (longitudinal sections) known as pith flecks. These are the result of the tunneling of the larvæ of small moths and possibly of other insects.

The demand for birch wood has increased rapidly during the past ten years. According to the census returns the output in 1910 more than tripled that of 1899. The total quantity was nearly 421,000,000 feet, cut by 3,703 mills, located in thirty-two states, ranging as far south as Georgia and Texas and as far west as Washington. Wisconsin has led in the cut of birch lumber for several years and, with New Hampshire, reported an increased production in 1910. Wisconsin supplied in 1910 over forty-four per cent of the cut; the New England states contributed a little over twenty-five per cent. No distinction of species is made in these returns.

Birch has not been used to any considerable extent for tight coo- perage though occasionally employed for half-barrels. The revision committee of the Chicago Board of Trade has issued a revised list of woods for the packing house trade and as birch is included it will probably become important in that class of tight coo- perage. In the report of the woods used in tight coo- perage in Canada birch is credited with 105,000 staves out of a total of 7,137,000. For slack coo- perage in this country, birch ranked seventh in 1910, with a total of 61,438,000 staves and 3,131,000 sets of heading. In Canada the

number of staves was 2,705,000, heading 486,000 sets, hoops 986,000.

In the manufacture of veneer the amount of birch consumed was 27,633,000 feet, log scale, in 1910, a very considerable increase over preceding years. In 1908, for example, the total amount was some 10,000,000 feet less. Most of this may be classed as utility veneer, though considerable of it was for furniture, cabinet work and interior trim.

Birch is one of the three principal hardwoods used in destructive distillation. Charcoal, crude wood alcohol and gray acetate of lime are the leading products. The total amount of beech, birch and

maple consumed for purposes of distillation in 1910 was over 1,250,000 cords, but no figures are available as to the proportion of birch. From the bark of the sweet birch an oil with wintergreen flavor is obtained, which is used for flavoring purposes.

The wood of none of the birches is durable in contact with the soil. The use of preservative treatment, however, is bringing the wood into common use for railway ties. It is strong enough to resist wear and its structure is suited to ready impregnation. The latter is of particular importance, as it lessens materially the expense of treatment.

Sweet, black or cherry birch (*Betula lenta*) is a common tree of the central hardwoods region, being widely distributed. It attains its greatest dimensions on the western slopes of the southern Appalachians. The wood is the hardest and heaviest of the birches, is very strong, takes a high polish, has a high satiny luster, stains well and is often called mahogany birch. The texture and grain are even and fine and the wood works with ease. Specimens with wavy and curly grain are not uncommon and have a high value for cabinet work. The wood is readily cleavable and is liable to split in nailing.

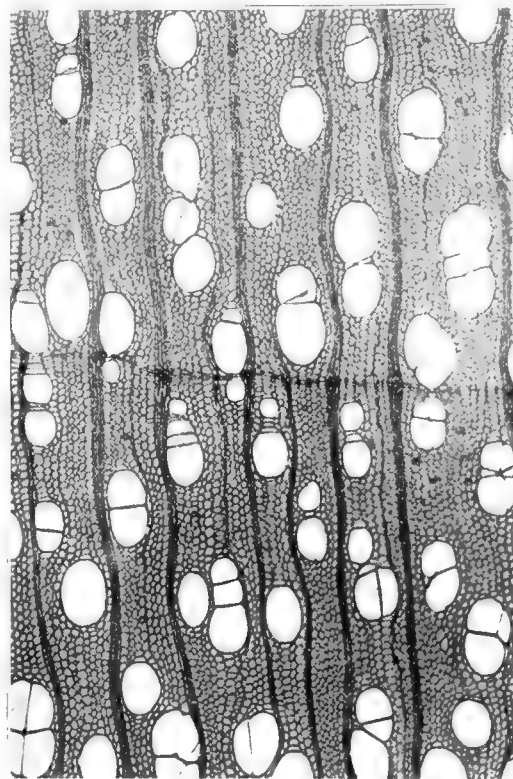
It is not always easy to distinguish this wood from that of the yellow birch. Upon comparison, however, it will be found that sweet birch has somewhat heavier, harder and stronger wood. The pores are larger and the rays are wider and more conspic-

uous. The color is brown tinged with red, often deep and handsome. It is unusual to find specimens marred with pith flecks. The bark is like that of cherry and when a bit of it is present on a waney board identification is made very easy.

Sweet birch is one of the most important furniture woods of the United States and when properly stained makes one of the best imitations of mahogany of any native wood. It has largely taken the place of cherry because it is cheaper. For example, the furniture factories of Maryland use annually upward of a million feet of sweet birch, worth \$26 per thousand at the mill, and only 6,500 feet of cherry, costing \$73 per thousand. It is extensively employed in all kinds of furniture and cabinet work, frequently in combination with mahogany. It also makes good flooring and interior finish as well as the numerous other uses to which the birches as a group are put.

Yellow or red birch (*Betula lutea*) derives its name from the color of its bark. It is one of the largest hardwood trees of north-eastern America, is very abundant and of its largest size in the eastern provinces of Canada and in northern New York and New England, being small and uncommon in southern New England and southward. It is a valuable tree of the Lake States.

The wood is structurally much like sweet birch, but is finer textured. The pores, which are moderately abundant, are smaller and



CROSS SECTION OF PORTIONS OF TREE GROWTH RINGS OF SWEET BIRCH. MAGNIFIED FIFTY TIMES

the rays are uniformly small and inconspicuous. The wood is somewhat less heavy, hard and strong than sweet birch, but unless one has specimens to compare, distinction is often difficult. The presence of a bit of the yellow, exfoliating bark in a wane specimen is always a reliable index of the species. Pitch flecks are of rare occurrence. The uses of the wood are very similar to those of sweet birch, though the wood is not prized so highly for furniture. It makes excellent flooring.

Paper or canoe birch (*Betula papyrifera*) gets its common names from the papery nature of the bark and from the fact that the bark has been rather extensively used for canoes. Its economic distribution is along the northern border of the eastern half of the United States and north into Canada. The only extensive stands in the United States are in the Lake States and northeastern New England.

The wood is of medium weight, fairly hard, strong and tough, close grained and uniform textured. The green wood is sappy and rather heavy and difficult to handle. The wood holds its shape after seasoning, turns readily on the lathe and finishes smoothly. The sapwood is nearly white and makes up the entire stem of young trees. As the tree gets older heartwood, light brown tinged with red in color, begins to form and is considered a defect for most uses to which the wood is employed. By some this darker color is attributed to disease, but in reality it is the normal condition of heartwood. Pitch flecks are very common in this species. The rays are very fine and inconspicuous and the pores are very small. The wood cannot readily be distinguished from that of the gray birch and western birch. The appearance of the white, papery bark is an infallible guide to the identification of unpeeled logs or wane pieces.

The principal use for paper birch is for spools, and some 40,000 cords, or more than half of the total cut, is consumed for this purpose. It is also employed in the manufacture of shoe pegs, shoe shanks, toothpicks, dowels, novelties, shoe lasts, clothespins, hairpin boxes, bobbins and shuttles. The wood is too hard and heavy for ordinary construction lumber, too soft for hardwood lumber, and not striking enough in appearance to be popular for furniture or interior finish. The presence of red heart unfits the timber for spools and its other important uses. The bark, which is tough, resinous, durable and impervious to water, is used by all the northern Indians in their canoes and for baskets, bags, drinking cups and other small articles, and often to cover their wigwams in winter. It is also employed somewhat in the manufacture of novelties and experiments are being tried to perfect some way of separating it into its natural layers for use in tipping cigarettes in place of cork.

Gray birch (*Betula populifolia*) is a short-lived tree of small size and little economic importance. It is most abundant in the coast region of New England and the middle states, springing up in great numbers on abandoned farm lands or on lands stripped by fire of their original forest cover, later giving place to other species. The wood is much like that of paper birch and is employed for the same purposes. Its principal use is for fuel. The bark is somewhat the color of paper birch, but is close and firm instead of exfoliating in paper scales.

Red or river birch (*Betula nigra*) occurs along streams throughout the eastern half of the United States. It is nowhere abundant and rarely attains large dimensions. While timbers are often of large diameter near the ground, they commonly divide into numerous branches at a height of from fifteen to twenty feet. The bark is of a reddish brown color, mostly rough and shaggy, giving the tree a ragged appearance. The wood is rather light and soft, moderately strong, rather tough. The pores are very numerous and are larger than in other species. The wood fibers have rather thin walls, in contrast to those of sweet and yellow birch. The rays are as large as in sweet birch, but less distinct because of the lack of contrast with the rest of the wood. The wood is not extensively used, but has a value for various purposes, such as hoops, baskets, corework and fuel.

Western birch (*Betula occidentalis*) is the largest of the American birches, frequently measuring over four feet in diameter and one hundred feet in height. It resembles the paper birch and is so similar to it that its true range has not been determined. It is known, however, to occur in northwest Washington and British Co-

lumbia, but its occurrence is so infrequent that its use commercially is very restricted. The wood is fairly hard, compact, fine and uniform textured. Its only known use is in the manufacture of interior finish and hardwood flooring. A total of 315,000 board feet, worth about \$46 per thousand, was reported used for this purpose in Washington in 1910. It is very probable that the wood is suited to furniture manufacture, although none has been reported as being so used.

The other species belonging to the birch family (*Betulaceae*) are blue beech (*Carpinus*), hornbeam or ironwood (*Ostrya*), alder (*Alnus*) and hazel (*Corylus*). In structure, however, these woods are quite distinct from birch which most resembles maple. One of the principal distinctions between birch and maple lies in the size of the rays, part of those of maple, especially sugar maple, being much larger and more prominent than in birch. There are also differences in color, weight and texture. Under the compound microscope a decided difference is noted in the vessels of the two woods. In maple the vessels are spirally marked and the perforations between segments are rounded and simple, while in birch the vessels are without spirals and the perforations from one segment to another are scalariform—that is, crossed with little bars like the rounds of a ladder. These features are enough to enable an expert to separate with certainty the smallest shavings of the two woods.

S. J. R.

Feeding Draft Horses

The Pennsylvania agricultural experiment station recently conducted a series of experiments for a period of eighty-four days to determine the effect of certain kinds of feed on draft horses. The conclusions reached should be of interest to those who use horses for heavy hauling. The purpose of the experiments was to obtain data in regard to the efficiency of three different rations for fattening purposes, corn, oats and hay. In one of the experiments cottonseed meal was used in place of oats to determine whether the less expensive ration of corn, cottonseed meal and hay is equally as efficient as one of corn, oats and hay. As corn silage furnishes digestible nutriment at a less cost than any other obtainable rough feed, a ration of corn, cottonseed meal, hay and silage was used in comparison with one of corn, cottonseed meal and hay to determine whether horses could be fed silage without detriment to health or reducing the efficiency of the ration.

The following conclusions were reached as a result of experiments on twenty-one horses during the period of eighty-four days:

Silage which is made from mature corn, is free from mould, has not been exposed to air too long before feeding and is properly supplemented with other feeds which will make up the deficiency in protein, can be fed to horses with safety when care is used to have them become gradually accustomed to it.

Horses fed silage as a portion of their ration consumed less grain, made their gains at lesser cost per pound, were sleeker and better finished than when fed on rations not containing silage.

Using cottonseed meal to replace oats resulted in a cheaper ration, a larger gain, smaller cost of gain and a higher finish in fattening horses.

The cost of gains varied from 13.4 cents to 17.7 cents per pound; the rate of gain, 1.59 pounds to 1.78 pounds per head daily, due to selections of rations for fattening purposes.

The rate of gain depends upon the ration used and the temperament, disposition, age, condition and type of individual.

The most profitable horse for feeding purposes is one that shows every evidence of draft blood, with clean, short legs, wide cannons, deep and wide both in chest and in middle, showing constitution and capacity throughout.

There is little change in depth of body or length of body from fattening, the greatest change being an increase in width and an apparent improvement in the spring of rib.

The greatest changes in form due to fattening are noted in those parts of the body where the natural covering of muscle is thickest.

The height at withers is greater in a thin horse than the height at croup. When finished, the height at croup is greater than that at withers.



Sawmill, Resaw and Power Problems



The growing use of the resaw in lumber manufacturing has given an opportunity for sawmill men to study the machine and the best way to utilize it. While not all lumber manufacturers believe that the resaw is adaptable to every purpose—and in view of the wide range of conditions under which sawmills are operated it would be asking too much to expect that it would fit the needs of everybody in the business—those who have used it under the right conditions are enthusiastic as to its possibilities in the direction of increasing production and lowering manufacturing costs.

The right conditions appear to be those under which there is an ample supply of timber, and where the profits are made through putting out the maximum quantity of lumber. In the case of the small mill, which must study each log carefully as it goes through, and must make out of each one the best possible lumber that can be produced, altering the thickness according to the requirements of this test, it must be admitted that the resaw cannot do the operator much good. Hence it is logical to expect to find, and actually to find, resaws used most successfully in the big operations where quantity, produced under uniform conditions, is desired, rather than a relatively small output varied as to thickness by the necessities of getting the best grade that the log will produce.

In this connection an interesting plan has been used by one of the big sawmill men of the southern hardwood country. Instead of using his resaw for the output of one band mill, as is usually the case, he has planted his resaw where it may receive the lumber cut by twin mills. Thus there is a regular tide of thick lumber descending on the resaw and going out thin, and while it sounds like asking a good deal of the crew of the resaw to handle twice as much lumber as the men who are handling the operation of the band mills, it is not such a hard proposition after all.

It must be remembered that since the resaw can be fed continuously, while the band mill necessarily loses time after each cut in getting back in position for another, the resaw ought to be able to cut twice as much lumber as the band mill, and then some. And by putting it up to the resaw to take the product of two band mills, the lumberman has a chance to get his quantity cut at a still lower figure than when the resaw is asked to cut thin lumber out of thick for the output of only one band mill.

In the instance noted the plan has worked beautifully, and the sawmill man is well-pleased with the success of the idea thus far, believing that it has made his resaw much more valuable than it would be if it were used in the regulation fashion. While resaw manufacturers do not stress this proposition, it is probable that they would find it worth investigating, even though it might be too extreme to justify recommendation as a general proposition.

A big sawmill man who has always believed in the use of the resaw has devised a plan of operating it which is somewhat out of the ordinary, but which he thinks will be economical. That is the installation of separate power equipment to take care of that particular machine. Everybody knows that a big resaw eats power pretty fast, and consequently a mill which is running a resaw must have pretty large power facilities. In this case the millman decided to put a resaw in his plant, which was comparatively new, and was confronted with the question of installing a new boiler and a larger engine. Instead of putting the new equipment in the present power plant, and operating it all as one battery, he decided on the other scheme, and the resaw will be run under its own power, that is, with energy developed in a plant reserved for that particular purpose.

The advantages of the plan are numerous. In the first place, since, as stated, the power production of the mill must equal the maximum requirements of all the machinery, and where a resaw is used must be able to take care of that load as well as others, the power capacity would be much larger than is necessary when the resaw is not in operation. And as there are occasions when conditions do not require the operation of the resaw, it would be a

big waste of power to be producing enough to run the additional equipment if the latter were not being operated.

The same argument which applies to the use of individual motors is applicable to the proposition of special power equipment for the resaw. You use power only when your machine is running. While the coupling up of individual power units is not advisable in a steam plant as a rule, and only when a large unit like a resaw, derrick or similar proposition is concerned, it certainly has advantages in a case of this kind.

Another benefit to be derived from the plan is that it will enable the cost of the operation of the resaw to be figured more exactly than under the other plan. Inasmuch as the sawmill man who has devised this scheme is using the resaw for the first time, although he has always been inclined to favor it, he wants to know just what it is costing him to run it, and whether he is making money on its operations. If it were being run with power from the main plant supplying the rest of the mill, it would be difficult to figure how much of the power produced was being consumed in the resaw. With its own power units operated to take care of its individual requirements, however, it is a simple matter to separate the consumption and charge to the resaw just the expense of the power that is consumed.

And the interest on the investment in the resaw itself plus its power equipment can likewise be calculated easily, thus making it an easy matter to get the "dope" on the machine from one end to the other. The sawmill operator believes that by the time he has had his resaw in use for six months he will have some interesting figures as to the cost of running it, and likewise as to the cost of producing lumber when it is in use. As he has been running his mill for several months without it, his comparison of figures ought to be a striking demonstration of whether or not the resaw is all that its advocates claim.

Speaking of the power question reminds one that the average sawmill burns up a lot of power that it doesn't use. Of course power is cheap when fuel is found in the waste of the plant, but at the same time, there is no need of wasting it, and frequently added boiler capacity with a rearrangement of the transmission system would enable the old plant to take care of all requirements. One of the easiest ways to lose power is through improper adjustment of shafting. If it is not lined up perfectly true, the transmission of power from the engine to the machine will be accompanied by losses which would amaze and impress the most careless millman. One of the disadvantages of ordinary sawmill construction is the use of timbers as supports for shafting. In many instances these gradually sag and get out of line, with the result that friction occurs and the belt tightens up and pulls hard on the pulleys. In most of the newer sawmills this feature has been taken care of by the use of concrete supports for the piers holding the shafting, so that there is less danger of it getting out of true.

The use of more transmission equipment than is really needed is one of the defects most frequently noted in sawmills. A graphic instance of this was given recently when a millman who had exhausted the timber on a tract which he had been working for several years moved his mill to a point further south. His operations previously had gradually developed, new equipment being put in, and additional countershafts provided, with a multiplication of gears and belts, so as to take care of all the various units requiring power. When prepared to put in the second mill, he asked his superintendent to figure out the best method of arrangement of the machinery so as to reduce the power requirements if possible.

"We are going to have to buy another boiler and increase the size of our engine," he said, "unless we can figure out a system of cutting down our power requirements, for the reason that we shall have some additional sawmilling machinery at the new plant. See what you can do."

The superintendent and the engineer got together and after

plugging away at the problem for some time emerged with a scheme which they submitted to the boss and got approval on. It provided for a more systematic and direct arrangement of the machinery, and eliminated most of the shafts and gearing. When they put the scheme into effect, they found that the old power plant, which had been groaning under the load imposed by the former conditions, was now able to carry the mill, even with its new equipment, along

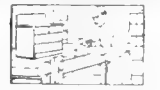
so smoothly that there was no comparison. The mill had simply been using a lot of power it didn't need.

Poor transmission systems frequently use up over fifty per cent of the total power production, and including friction and other unavoidable losses, it often happens that the effective machinery in the plant receives about twenty five per cent of the power that is turned out of the engine.

G. D. C., Jr.



Utilization of Hardwoods



ARTICLE SIXTY-THREE THE MANUFACTURE OF MOTOR TRUCKS

The rapidly increasing use of motor trucks of various sizes, from the light delivery wagon to the seven-ton Juggernaut which lords it over all the vehicles of heavy traffic, has created a new field for the employment of hardwoods which, in time, bids fair to be very close to the top of the list in importance, both in the quality of the wood demanded and the quantity consumed.

The bodies of these vehicles of the day demand materials in keeping with the costly and intricate mechanism of their motive power, and some of the models turned out for such uses as that of the better department stores, for instance, are not to be surpassed in appearance or fineness of finish by the most aristocratic of the pleasure cars.

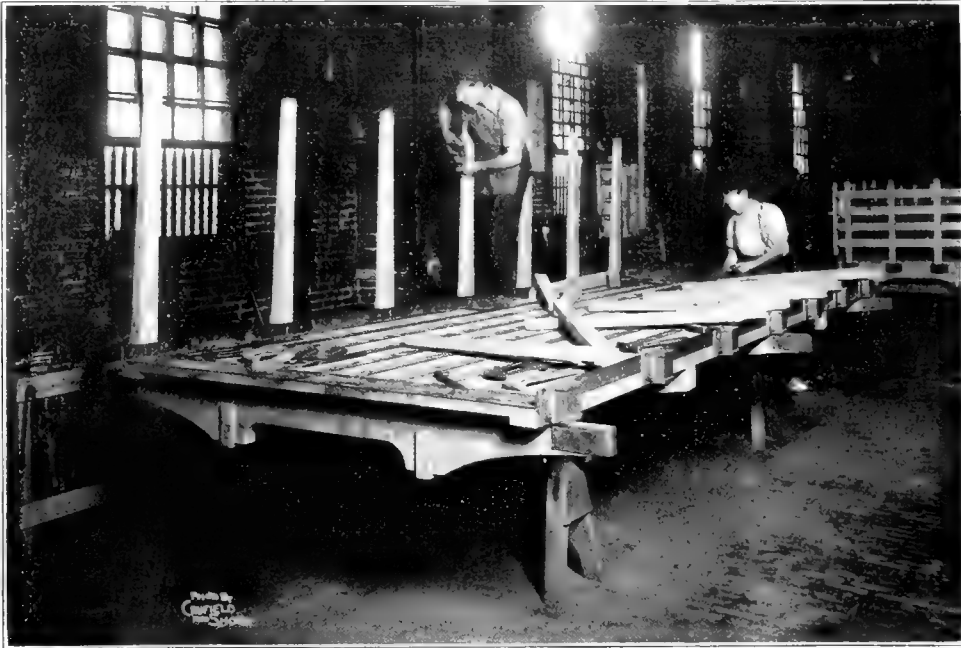
It is a fact, too, that more care is being devoted to the manufacture of bodies than formerly. In the earlier days of the motor truck industry, which is not so very long ago, the manufacturer was content to turn out the chassis, upon which he mounted only a mere bottom, leaving to the devices of the purchaser the matter of fitting it with the particular style of body suited to his individual requirements. This is no longer the case. In fact, the usual procedure is precisely the opposite. Some of the leading manufacturers receive the motor and chassis from another factory and merely assemble it on their floor and devote their entire attention to the work of preparing the body of the truck for the exact needs of the customer's business.

Many manufacturers, with large factories and capacities, make no stock trucks whatever, confining themselves to turning out vehicles to the special order of their customers. For example, a truck of seven tons' capacity was recently constructed by a middle western concern on the detailed orders of one of the largest corporations in the country, one of the chief requirements being that it be just as large as the measurements of the house in which it was to be sheltered would permit!

The factory turned out a monster, measuring a few inches over seventeen feet in length and seven feet five inches wide, yet so designed as to be beautifully proportioned and almost incapable of being loaded beyond the limits of its power to pick up the load and walk off with it.

The material most in use in the manufacture of motor truck bodies is the best grade of white oak. The bottoms, sills and cross members are made of this wood, in various dimensions, depending in some degree upon the size and capacity of the truck. For instance, in the big machine just referred to, the bottom boards were one and one-quarter inches thick and seven inches wide; the sills were of two-inch material, the end cross-members measured two and one-half inches and the others two and one-quarter inches, dressed. These figures will illustrate graphically the quality of the material required, as well as the strength of the vehicle itself.

The length of the bodies and hence of the boards required for use in the bottoms, ranges from seven to thirteen feet, although sometimes an order is received which necessitates longer lengths, sometimes running as high as sixteen feet. Some makers use three and one-half inch widths, although the better practice seems to be to use wider boards. Narrow tongued-and-grooved bottom boards, of course, make a tighter bottom for the time being, but an absolutely tight bottom is not necessary, as a rule, in a truck of any sort, and the



CONSTRUCTING TRUCK BODY, SHOWING WOOD USED

greater number of edges exposed to the weather in the narrower widths give just so many more opportunities for the beginning of decay. There is a limit to the width, however, as excessive dimensions in this direction would split too readily under rough work. Ten inches is about as wide as boards can be used for motor truck bottoms, and they are usually narrower. Ordinarily the width is adjusted so that the boards will be of equal size and seven inches is about the best width.

Wheels usually come to the factory ready to go on the truck, although there are some concerns which manufacture everything that goes into the vehicle. Spokes and felloes are of second-growth hickory, as in the better sorts of wagons. Another place where hickory finds a use in the motor truck is on heavy machines which are built without solid sides, the supports being stakes and slats. Stakes used on such trucks are of hickory, the side slats being of ash.

Ash is also the material found best for the framework of the tops of light delivery trucks, whether the covering is of solid wood or of some woven fabric, such as canvas or other waterproof material.

The posts and ribs of the framework vary in size and the slats are usually five sixteenths of an inch by one and one half or two inches.

For the panels of the wood tops and bodies of these light machines poplar comes into play. As with all other materials used in such work only the best grades have any call, the usual material being good yellow poplar for this purpose. The panels are solid, as a rule, though veneered work is sometimes used. "Blue poplar" was at one time attempted, but it was found that it would not stand painting as well as the better grade, and this quality of taking paint well is a prerequisite for the side panels of delivery trucks, which must have a regular carriage finish. The side panels are protected from direct contact and pressure from within by an inner frame, usually of ash.

The machinery necessary in the manufacture of truck bodies is similar to that used in a wagon factory. Among them might be mentioned the mortising machine, tenoning machine, Universal wood worker, variety saw, thirty-inch planer, boring machines of various sizes and cross-cut and rip saws.

The raw material usually comes to the factory in the shape of the rough lumber from the mill, which is stacked in the yards for seasoning. Some manufacturers, however, have something to learn about the care of high-grade lumber of the sort required in this industry. An instance is related of a prominent maker of bodies who stacked a large shipment of quarter-sawn white oak in his yard without proper protection and was compelled to charge the price of the greater part

of it to experience. Yet he found that it was ruined by checking and splitting.

This sort of thing is not common, however, as most of the men who are branching out into the business of making trucks have had enough experience with lumber to know how it should be handled, especially when their judgment is whetted by the payment of the good round prices demanded for the sort of stuff that must be used.

As the advertisement of one of the largest makers of power trucks declared recently, there will be a hundred of these within a year or two where there are five now. If this is true—and the increasing use of such vehicles by progressive concerns in every business would seem to indicate that it is—the hardwood mills will be called upon to supply a vast quantity of the better grades of white oak, ash and poplar, and forests of second-growth hickory will be needed for the stout wheels on which the immense burdens of every branch of commerce will be carried.

Where now there are small shops, turning out a truck or two a month, as a sort of experimental sideline, there will be great factories, with an output running into scores and hundreds a day, and the mills must be prepared to meet increasing calls from such quarters in the very near future.

HARDWOOD RECORD is indebted to the Longest Brothers Company and the Kentucky Wagon Manufacturing Company for the information contained in this article.



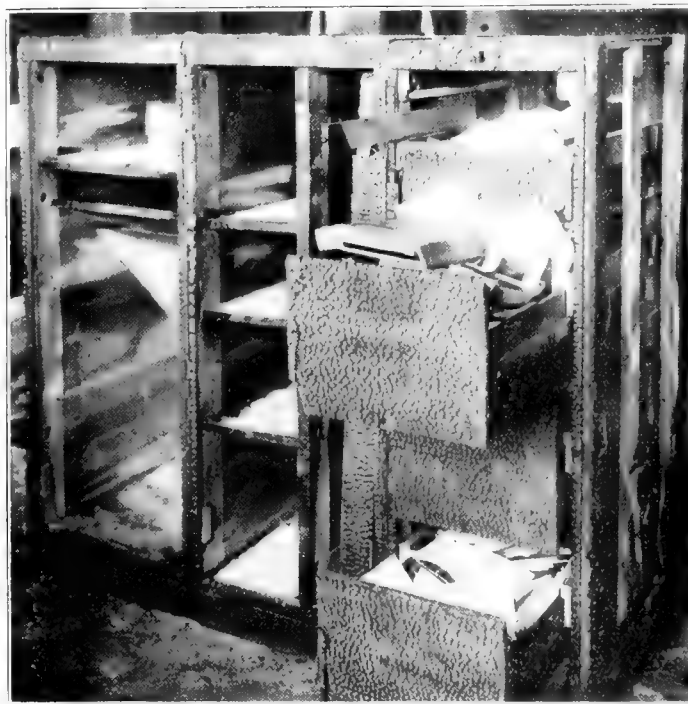
Superiority of Wooden Filing Cabinets



Early in the morning of October 10 last, a disastrous fire occurred at the Hotel Utica, Utica, N. Y. In the automobile club-room connected with the hotel were several wooden filing cabinets and one or two of steel. As a result of the fire the steel cabinets were absolutely demolished and their contents totally destroyed. On the contrary, the wooden filing cabinets were burned only on the outside, the veneering peeled in places, but the cores were left intact. The contents of the wooden cabinets, which contained valuable letters and papers, were practically uninjured save being a trifle wet from the fierce onslaught of the fire hose.

Accompanying this article is a picture of a section of these wooden cabinets, from the frames of which quite a number of the drawers had been removed before the photograph was taken. It shows better than any text can tell the splendid way in which these wooden cabinets protected their contents in this fire.

The makers of this wooden equipment advise HARDWOOD RECORD that they are pleased with the way their mahogany units withstood the fire, that hardly a just comparison could be made between them and the steel cabinets, because the steel cases in the fire were of a thin sheet metal, and not of a very high-type. These went absolutely to pieces, including the contents, while in many cases the wooden cabinets charred almost through, preserved their contents perfectly.



WOODEN FILING CABINETS WHICH PRESERVED THEIR CONTENTS DURING DISASTROUS FIRE HOTEL UTICA, UTICA, N. Y.

In another letter from the same source, the writers allege that they have made exhaustive investigation into the relative merits of wood and steel filing cabinets, and are producers of both. They believe that "for certain purposes steel is a better equivalent than wood, although we do believe that many people err greatly in assuming that steel in itself is fireproof. We have every expectation that the sensible and legitimate demand for steel furniture will increase, although we hope the public will come to realize that it is not ideal for all purposes."

This perhaps is a very fair statement of the situation from a manufacturer of steel furniture, and as a matter of fact is unusually fair. The public generally does not differentiate between fireproof, fire-resisting and non-combustible qualities. People should comprehend this most simple proposition: wood is not non-inflammable, it is a remarkably slow conductor of heat and

is fire-resisting. On the contrary, steel is non-inflammable, but by reason of its conductivity of heat will not of itself give fire protection to the contents of filing cabinets, desks and similar furniture unless it has hollow walls, like a fireproof safe, in which is packed fireproof material.

For a generality of purposes, for filing cabinets, desks, and kindred furniture, wooden furniture is infinitely superior to any steel equipment that has yet been devised, and the cost is very much less.



Traffic Matters Around Memphis



Indications are that rate problems will require considerable attention at the hands of the Lumbermen's Traffic Bureau, as well as at those of the lumbermen of Memphis, in the immediate future. J. H. Townsend, manager of the Lumbermen's Traffic Bureau, is just in receipt of official notice from the Interstate Commerce Commission that all the railroads operating between Memphis and New Orleans have filed notice with that body increasing rates on all hardwood lumber shipments from Memphis to New Orleans two cents per hundred pounds. The present rate is ten cents and the new rate will be twelve cents. The latter is to become effective Dec. 20. The notice was filed by M. P. Washburn, agent of the Southeastern Mississippi Valley Freight Association. Mr. Townsend has already asked the commission to suspend this advance until the lumbermen here have had an opportunity of presenting their side of the case, and he believes that this action will be taken in accordance with the usual custom of that body. The announcement of this advance brings to mind the fight which was waged several years ago by the lumbermen of Memphis in the case of the J. W. Thompson Lumber Company et al. vs. the Illinois Central and the Yazoo & Mississippi Valley railroad companies, in which the plaintiffs won a signal victory. The twelve-cent rate was ordered cancelled, the ten-cent rate was ordered restored and the plaintiffs were awarded reparation for the period during which the advance of two cents was paid. The commission, in giving its ruling at the time, pronounced this advance both unreasonable and unjustifiable.

The Illinois Central and the Yazoo & Mississippi Valley railroad companies have also filed notice with the commission of an advance of one cent per hundred pounds on cottonwood and gum shipments from all points on their lines in Mississippi to New Orleans, with the exception of several places where flat rates have been withdrawn and class rates have been substituted. The latter action principally affects points in the Leland, Helm and Vicksburg districts and amounts, in effect, to an advance of from five to six cents per hundred pounds. It does not, however, apply to any items except cottonwood and gum, but it affects a number of Memphis lumbermen and this proposed advance, which also becomes effective Dec. 20, will be opposed by the Lumbermen's Traffic Bureau. The first step will be, as in the other cases, a request for the suspension of the advance until the lumbermen can be heard.

Aside from the advances already referred to the next most interesting rate problem is that of securing through bills of lading on export shipments from points west of the Mississippi river. The Anderson Tully Company has already filed a petition with the Interstate Commerce Commission against the western roads seeking through bills of lading on export shipments. Chairman Prouty of the commission will be in Memphis Dec. 16, at which time this subject will be heard. It is pointed out by lumber interests that a most serious hardship is worked upon them through the failure of the western roads to grant through bills. Since this petition was filed the Shreveport, Vicksburg & Pacific has announced that it will issue through bills of lading in all cases where arrangements have been made with the steamship companies for the prompt transportation of cargoes in question. It remains to be seen what effect the action of this road will have upon the others west of the Mississippi. So far it has had none. The Lumbermen's Traffic Bureau here has taken up this subject with the Interstate Commerce Commission and has suggested that it will be agreeable to the lumbermen if the western roads will issue through bills of lading on somewhat the same terms as the Illinois Central and other roads east of the Mississippi. These demand the engagement of steamship room at specified sailings so that the railroads may avoid the payment of demurrage at New Orleans, and also prevent a recurrence of the serious congestion which occurred in that port last winter and spring.

Lumbermen here are very much interested in the decision of the Rock Island System to place Memphis and Hopefield, Ark., frequently known as West Memphis, on the same basis on west bound shipments. Efforts have been under way for a number of years to get the Rock Island System to agree to this equalization. When the Rock Island purchased the Choctaw, Oklahoma & Gulf Railroad some years ago it was understood that the former was to take over all the contracts and agreements of the latter. The Rock Island, however, persistently refused to equalize rates as between Memphis and Hopefield until a few days ago, when it announced that it would do so. The Lumbermen's Club and the Memphis Freight Bureau were instrumental in bringing about this equalization, which means a considerable saving in freight rates to lumber shippers here.



The Bugbear of Innovations



"No," said the Colonel, "you needn't tell me that hardwood is in demand, is going higher every time you turn around, and that this would be a mighty good time to spread out with the idea of making more dimension stock in the woods to save some material that is going to waste, reduce the amount of railway tonnage so we can do more business with the same cars, and save a lot of freight charges. I know that already, and have been thinking about it a whole lot, and wondering why it is everybody has been so backward about this proposition that you all have urged so persistently in HARDWOOD RECORD. And I believe I've the answer—it is not so much a question of the ultimate success of the dimension stock idea as it is the bugbear of innovations. Millmen and other lumbermen get into a rut, and then instead of getting out when they see a way open before them, take refuge behind the theory that it takes time, work and lots of money to introduce a new idea to the trade.

"We have the same thing at times when introducing a new cabinet wood. It takes time and a little uphill tugging, and we shy at it and go along the same level way. By and by some enterprising and energetic fellows do take it up, though, and then they have great sport and do a big business all at the same time, and the other fellows come piking along in their wake afterward.

"Do you know what it all makes me think about? Well, I'll tell you. It takes me back in memory to a time when we boys who lived out in the woods where the timber grows trudged through red clay and dead leaves in the winter time to a little school house surrounded by hills and trees to get a little readin', writin' and rudimentary reason. There was a moral lesson in rhyme in one of our readers that started off like this:

... 'Twould be royal fun cried lazy Ned,
To coast upon my fine new sled,
And beat the other boys;
But then I can not bear to climb,
The thresome hill, for every time
It more and more annoys."

"The moral was that the other fellows were having a uproaring good time, with less to do it on than Ned, but they had the will, and didn't mind that little uphill trudge for the game. I can't recall all of this moral jingle, but it wound up with Ned grown into a man, and

... He decided still
That silly bugbear of uphill,
And did a dance at last."

"That's the thing that stands in the way more than anything

place of the time and trouble it takes to cut lumber by the old methods. It is the only way one can make a good excuse for lots of the backwardness about here.

"Why, only the other day I was visiting at a plant that makes table slides. Here they were using log run lumber, and cutting all of it up into small dimensions. I didn't measure the stock, but you can easily imagine the dimensions used for table slides. And that lumber had come in on a freight rate of twenty-one cents; which is not so bad as if it had been forty cents, but it was enough to make quite an item in the cost, when one considers that perhaps half the weight was cut out in reducing it to dimensions. Why might this not just as well have been done at the sawmill? It would have saved in the cost to the slide man, would have given the millman a chance to work in other material going to waste around the mill, and it would have required fewer cars for shipping so that it would have helped out at the car shortage end, too.

"Immediately afterward I was in a furniture factory where they were cutting gum lumber into dimensions. Some of it was thick stock in wide boards and was being cut into bedstead posts. There was an excuse for part of it, because it was being shaped on a band saw. But with a pattern of the bandsawed shape in the hands of the millman and a list of the other dimensions used regularly, quite a lot of this furniture stock could have been supplied in dimension form with the same elements of economy as attached to the table slide stock.

"I could go on for hours telling you of things of this kind, but what's the use? It's not here that you need the logic and arguing. What you need is to get rid of that silly bugbear of the 'uphill tug.' In the modern scheme of salesmanship things of this kind should be considered great sport, and they should be gone after with the same zest that the boys used in going up the hill to coast down—all but lazy Ned. Tell the folks that, and maybe they will see things in a new light—see how these innovations can help business instead of making it harder."

J. C. T.

Chicago Lumbermen's Meeting

The Lumbermen's Association of Chicago, which to outside appearances has been dormant during the summer and early fall months, sprang into renewed and increased activity on November 19, when it held its first monthly luncheon at the Hotel Sherman. About 200 members of the local trade, representing every branch of the lumber business, were present at the luncheon and the meeting which followed.

No comment is necessary on the character of the entertainment furnished by the entertainment committee. The excellent luncheon which it provided was followed immediately by an active business meeting, presided over by President F. L. Brown.

Mr. Brown opened the meeting by briefly outlining the growth of the association, telling of the expansion which had been made possible by the amalgamation of the various lumber interests in the city. He stated that the object of all association work should be along the lines of improvement and economies in the operation of the lumber business and in the extension of opportunities.

The first important question before the meeting was that of proposed increases in freight rates on hardwood from southern territory. All lines east and west of the river have already checked in advances to Ohio river crossings and western territory. The first petition of the roads will be to replace the special rate on box material of cottonwood and gum, as they claim that these woods should not enjoy a lower rate than the ordinary run of hardwoods. An advance placing them on a level with ordinary hardwood rates would mean an increase of two cents. It is further proposed to equalize the rates on hardwoods with the rates prevailing on pine from the southern territory. This would mean that the average advance on hardwood rates would be one cent; therefore this would necessarily be added to the other increase of two cents on box material, resulting in an increase of three cents on that grade of stuff. The railroads make their usual plea of insufficient funds and they have already definitely stated that they will check in these advances and let the Interstate Commerce Commission decide the question.

Elmer H. Adams of Chicago reviewed the broad question of freight rates on lumber which has been so directly before the lumber trade of late. He expressed as his opinion that the immediate object of the railroads is to bring hardwood rates on an equal basis with pine rates, but that this is but the first step toward a general advance on all lumber rates. He stated that he believed that after a reasonable period the old argument would be advanced by the railroads that pine necessarily should carry a greater rate than hardwood on account of its different character and that this increase would in the course of a short time be demanded and the whole movement would result in an increase on all lumber commodities in keeping with the proportions which are now maintained.

Mr. Adams referred specifically to the recent tap-line decisions of

the Interstate Commerce Commission. As he expressed it, the condition which brought this to a final decision was the practice of division of rates between the common carriers and the tap lines. Under this arrangement the owner of any kind of an apology for a railroad—which in some instances were positively not common carriers in any sense of the word—could secure what really amounted to a rebate on shipments from their points for through shipment. In other words, the tap-line owner secured from the railroads a certain division of the rate, differing under various conditions, merely because he happened to own a few lines of possibly rusty trackage. He would not even have to haul the material himself as the through line usually did the hauling for him. This practice has been stopped by decision of the Interstate Commerce Commission, although it is still under consideration by the commerce court. No decision has been handed down. The point Mr. Adams desired to bring out, however, was that with this practice stopped the railroads would secure the entire freightage and would not be compelled to make a division with the tap lines. It seemed obvious, according to the speaker, that if the roads have been operating successfully under this division arrangement, they could certainly continue to operate successfully without the division of revenues and were not necessarily in any need of freight advances. He expressed himself as of the opinion that unless emphatic protest is entered against the advances they will become effective at the time specified.

Mr. Adams also asserted that it was his opinion that all lumbermen owning freight bills which came under the old revision methods were entitled to reparation on such shipments during the last two years to the extent of the division to the tap line. He stated further that inasmuch as Chicago uses a great deal of low-grade lumber, the Chicago market should not be further handicapped by an increase in freight rates which would tend to place the actual cost of placing this low-grade material on the market so near to the level of value received that it would not be worth while to take it from the woods.

After considerable discussion, the matter of rate advances was referred to the board of directors, who will consider the advisability of protesting against their going into effect.

Harvey S. Hayden then spoke for E. A. Thornton regarding milling in transit privileges on shipments from the Northwest, particularly on shingles. The most pertinent condition pointed out by Mr. Hayden was that under the present ruling shipments must necessarily take two local rates rather than a through rate and that in order to secure a through rate it is necessary to designate final terminal point. The agitation for change in this milling in transit arrangement will apply only to shingles.

President Brown introduced J. S. Kemper, manager of the recently organized Lumbermen's Mutual Casualty Company. This company has been organized entirely by Chicago lumbermen and as a result of

the recent liability law adopted by the Illinois legislature. Mr. Kemper outlined the unsatisfactory conditions prevailing under the old methods of casualty insurance and showed the loose methods in vogue in computing the cost of insurance. He made a comparison of the methods employed by the two types of insurance companies.

The Lumbermen's Mutual company will provide means for covering every contingency likely to present itself to local lumbermen embracing its benefits. The local trade will also have the satisfaction of dealing entirely with a concern made up of men whom they know. A further feature is that the expense of placing insurance will be approximately twenty-five per cent instead of sixty per cent, as figured by the stock companies. In view of the fact that the company will specialize entirely in woodworking risks, it is reasonable

to suppose that its legal and medical service will be more better adapted to the risks than the stock companies taking general risks. For the same reason, the inspectors employed by the company will be more competent in the matter of effecting methods of accident prevention.

The company already in five weeks of work has had a million dollars more than the law requires of subscriptions. The lumber fire mutuals' net cash surplus and assets are in better proportion to insurance than any stock fire insurance company in the United States.

Mr. Kemper entered a strong and emphatic plea to the lumbermen for their cooperation in a proposition which cannot but result to their mutual advantage.

Following Mr. Kemper's talk the meeting adjourned.



The Perfect Sales Organization



"What is a perfect sales organization," asks one of the writer's friends, "one that could be applied to a large wholesaler or a very large manufacturer operating several mills?"

In answering the question, let it be understood that the sales office is at one point and that all stock is to be sold through that office. If conducted otherwise, there will be a number of cars sold twice. It does not look well to have to return orders; customers lose faith after one or two experiences of this kind. Explicit instructions should be on every letterhead to the effect that "all communications should be addressed to such-and-such an address." Then there can be no mistakes of the kind referred to.

The sales manager himself is the organization. He is the vital factor. It is "sales that move the wheels of business" and he is directly responsible. He is the brains; he imparts energy to the sales force and keeps stock moving and sales ever on the increase. He is alive to every change of condition and quick to take advantage of new ideas and new systems that will better his force. It is the man himself. As one authority puts it, "It is not the size of the concern a man works for, but the size of the man himself."

"A good soldier makes a good officer." In these days of efficiency and competition a sales manager must be a man who has been through every phase of the business from the logging end to the collections and credits, and must understand the uses and needs of every remanufacturer of lumber. Therefore he must have served his time in the mill and on the road. These are not the only qualifications, but they are the most essential. Knowledge is the foundation.

He must be a leader and a judge of men. If salesmen realize that he has been in their position at some time or other, he knows the hardships, he understands conditions, they'll know he is not unreasonable in his demands. When he writes a letter to any of the "boys" it is not a cold-blooded proposition—it is a letter from one part of the unit to another. Not long ago a salesman passed a letter to the writer to read. It was from his sales manager. "Dear Jim," it started off, "that surely was a clean-up you made in the state last week. The best batch of orders you've sent in in a long time. Business conditions were rather favorable, of course, and I know it can't be done every week. But try hard, anyway. If you can keep up the good work, it's going to make a little 'fatter' check each week. Here's luck." That's a letter of heartfelt interest and the kind of appeal that produces results. Ever get a letter like that? Few of us have.

He never sends out a salesman without complete information. It was all very well in days of the past to get up a list of stock and prices and turn out the men to sell it. But it won't do now. At least it will not get results. A salesman must have detailed information as to the widths and the average percentage of lengths, condition of stock for dryness, something about the texture and any other points that create interest. This information must be kept right up-to-date. It involves a lot of detail work, but it pays in increased sales. A salesman can then deal in facts—not general points. It makes a better impression on the customer, too, for he

knows that he is buying lumber of a definite value.

When a salesman knows that there is interest in him and his work it puts added interest in his own efforts. This added interest does much to create enthusiasm. Enthusiasm goes a long way in success.

Naturally the sales manager is in charge of all answers to inquiries. There are two ways to answer an inquiry. One is a business getter and the other isn't. That's the difference. When you write a man, talk to him. Do away with all stereotyped phrases, such as "We are in receipt of your favor of the 11th. inst., and, etc." He knows you got the letter or else you would not be answering. Get down to business. Talk. Get personal. Use abbreviated words; it's proper and wins favor. Just imagine that John Miller of the Miller Furniture Company is sitting opposite you and that you are telling him about the car of lumber he has inquired for. Imagine, if you will, that your stenographer is Mr. Miller. Talk to him. Use his name throughout the letter. That's the kind of letters that pull results. The formal letter for sales work was doomed a year or so ago. But few have caught onto it, however.

Advertising is part of organization. Lumbermen are just realizing that advertising and salesmanship go hand in hand and that one reinforces the other. No, not the old standing-card style of—here, now follow closely—you have some oak to sell. Now just imagine all the prospective buyers of oak standing before you for you to address them. Take them collectively; imagine them all as one person. Now talk about your oak. Tell how dry it is, describe it, suggest uses, bring in all your selling points. Then ask who is interested. Tell them to write or wire you! That's the way to write advertisements that sell goods. Now if others can do it (and they are doing it right now), you can. Why, right now you are probably running a standing card in some paper. People see the same thing year after year and there is nothing to attract them or to induce them to investigate further. But suppose you change your copy every issue. Have a new story about your products. Why, the readers will begin to look for your ads every time the paper comes out. You hear lots of men say, "No, I never read the ads in the trade papers; there's nothing new in there." That is—because for a great many years the trade newspaper had no real advertising. And some of the aforementioned still think there is none in them to this day. You know yourself that when you read a popular magazine you spend most of the time looking over the advertisements to see what is new. Well, that is just what the buyers of lumber are doing and especially now, when stock is scarce.

But to get back on the original topic. Sales efficiency doesn't stop at mere sales. Service is a new and all-important item today. Not only service in shipping, but service as to information, questions and adjustments. When an inquiry is received it should be answered immediately. If it cannot be answered right away, then it is up to you to write the inquirer, explaining why and also when he can expect to receive it. Most sales offices quote a price and then stop right there. If the order comes in, all right. If it doesn't, well—they wonder why it hasn't. The writer has always followed the plan

else it's the silly bugbear of uphill, of the time and trouble it takes to introduce new ideas and methods. It is the only way one can find a logical explanation for lots of the backwardness about new ideas.

"Why, only the other day I was visiting at a plant that makes table slides. Here they were using log-run lumber, and cutting all of it up into small dimensions. I didn't measure the stock, but you can easily imagine the dimensions used for table slides. And that lumber had come in on a freight rate of twenty-one cents; which is not so bad as if it had been forty cents, but it was enough to make quite an item in the cost, when one considers that perhaps half the weight was cut out in reducing it to dimensions. Why might this not just as well have been done at the sawmill? It would have saved in the cost to the slide man, would have given the millman a chance to work in other material going to waste around the mill, and it would have required fewer cars for shipping so that it would have helped out at the car shortage end, too.

"Immediately afterward I was in a furniture factory where they were cutting gum lumber into dimensions. Some of it was thick stock in wide boards and was being cut into bedstead posts. There was an excuse for part of it, because it was being shaped on a band saw. But with a pattern of the bandsawed shape in the hands of the millman and a list of the other dimensions used regularly, quite a lot of this furniture stock could have been supplied in dimension form with the same elements of economy as attached to the table slide stock.

"I could go on for hours telling you of things of this kind, but what's the use? It's not here that you need the logic and arguing. What you need is to get rid of that silly bugbear of the 'uphill tug.' In the modern scheme of salesmanship things of this kind should be considered great sport, and they should be gone after with the same zest that the boys used in going up the hill to coast down—all but lazy Ned. Tell the folks that, and maybe they will see things in a new light—see how these innovations can help business instead of making it harder."

J. C. T.

Chicago Lumbermen's Meeting

The Lumbermen's Association of Chicago, which to outside appearances has been dormant during the summer and early fall months, sprang into renewed and increased activity on November 19, when it held its first monthly luncheon at the Hotel Sherman. About 200 members of the local trade, representing every branch of the lumber business, were present at the luncheon and the meeting which followed.

No comment is necessary on the character of the entertainment furnished by the entertainment committee. The excellent luncheon which it provided was followed immediately by an active business meeting, presided over by President F. L. Brown.

Mr. Brown opened the meeting by briefly outlining the growth of the association, telling of the expansion which had been made possible by the amalgamation of the various lumber interests in the city. He stated that the object of all association work should be along the lines of improvement and economies in the operation of the lumber business and in the extension of opportunities.

The first important question before the meeting was that of proposed increases in freight rates on hardwood from southern territory. All lines east and west of the river have already checked in advances to Ohio river crossings and western territory. The first petition of the roads will be to replace the special rate on box material of cottonwood and gum, as they claim that these woods should not enjoy a lower rate than the ordinary run of hardwoods. An advance placing them on a level with ordinary hardwood rates would mean an increase of two cents. It is further proposed to equalize the rates on hardwoods with the rates prevailing on pine from the southern territory. This would mean that the average advance on hardwood rates would be one cent; therefore this would necessarily be added to the other increase of two cents on box material, resulting in an increase of three cents on that grade of stuff. The railroads make their usual plea of insufficient funds and they have already definitely stated that they will check in these advances and let the Interstate Commerce Commission decide the question.

Elmer H. Adams of Chicago reviewed the broad question of freight rates on lumber which has been so directly before the lumber trade of late. He expressed as his opinion that the immediate object of the railroads is to bring hardwood rates on an equal basis with pine rates, but that this is but the first step toward a general advance on all lumber rates. He stated that he believed that after a reasonable period the old argument would be advanced by the railroads that pine necessarily should carry a greater rate than hardwood on account of its different character and that this increase would in the course of a short time be demanded and the whole movement would result in an increase on all lumber commodities in keeping with the proportions which are now maintained.

Mr. Adams referred specifically to the recent tap-line decisions of

the Interstate Commerce Commission. As he expressed it, the condition which brought this to a final decision was the practice of division of rates between the common carriers and the tap lines. Under this arrangement the owner of any kind of an apology for a railroad—which in some instances were positively not common carriers in any sense of the word—could secure what really amounted to a rebate on shipments from their points for through shipment. In other words, the tap-line owner secured from the railroads a certain division of the rate, differing under various conditions, merely because he happened to own a few lines of possibly rusty trackage. He would not even have to haul the material himself as the through line usually did the hauling for him. This practice has been stopped by decision of the Interstate Commerce Commission, although it is still under consideration by the commerce court. No decision has been handed down. The point Mr. Adams desired to bring out, however, was that with this practice stopped the railroads would secure the entire freightage and would not be compelled to make a division with the tap lines. It seemed obvious, according to the speaker, that if the roads have been operating successfully under this division arrangement, they could certainly continue to operate successfully without the division of revenues and were not necessarily in any need of freight advances. He expressed himself as of the opinion that unless emphatic protest is entered against the advances they will become effective at the time specified.

Mr. Adams also asserted that it was his opinion that all lumbermen owning freight bills which came under the old revision methods were entitled to reparation on such shipments during the last two years to the extent of the division to the tap line. He stated further that inasmuch as Chicago uses a great deal of low-grade lumber, the Chicago market should not be further handicapped by an increase in freight rates which would tend to place the actual cost of placing this low-grade material on the market so near to the level of value received that it would not be worth while to take it from the woods.

After considerable discussion, the matter of rate advances was referred to the board of directors, who will consider the advisability of protesting against their going into effect.

Harvey S. Hayden then spoke for E. A. Thornton regarding milling in transit privileges on shipments from the Northwest, particularly on shingles. The most pertinent condition pointed out by Mr. Hayden was that under the present ruling shipments must necessarily take two local rates rather than a through rate and that in order to secure a through rate it is necessary to designate final terminal point. The agitation for change in this milling in transit arrangement will apply only to shingles.

President Brown introduced J. S. Kemper, manager of the recently organized Lumbermen's Mutual Casualty Company. This company has been organized entirely by Chicago lumbermen and as a result of

the recent liability law adopted by the Illinois legislature. Mr. Kemper outlined the unsatisfactory conditions prevailing under the old methods of casualty insurance and showed the loose methods in vogue in computing the cost of insurance. He made a comparison of the methods employed by the two types of insurance companies.

The Lumbermen's Mutual company will provide means for covering every contingency likely to present itself to local lumbermen embracing its benefits. The local trade will also have the satisfaction of dealing entirely with a concern made up of men whom they know. A further feature is that the expense of placing insurance will be approximately twenty-five per cent instead of sixty per cent, as figured by the stock companies. In view of the fact that the company will specialize entirely in woodworking risks, it is reasonable

to suppose that its legal and medical service will be much better adapted to the risks than the stock companies taking general risks. For the same reason, the inspectors employed by the company will be more competent in the matter of effecting methods of accident prevention.

The company already in five weeks of work has half a million dollars more than the law requires of subscriptions. The lumber fire mutuals' net cash surplus and assets are in better proportion to insurance than any stock fire insurance company in the United States.

Mr. Kemper entered a strong and emphatic plea to the lumbermen for their co-operation in a proposition which cannot but result to their mutual advantage.

Following Mr. Kemper's talk the meeting adjourned.



The Perfect Sales Organization



"What is a perfect sales organization," asks one of the writer's friends, "one that could be applied to a large wholesaler or a very large manufacturer operating several mills?"

In answering the question, let it be understood that the sales office is at one point and that all stock is to be sold through that office. If conducted otherwise, there will be a number of cars sold twice. It does not look well to have to return orders; customers lose faith after one or two experiences of this kind. Explicit instructions should be on every letterhead to the effect that "all communications should be addressed to such-and-such an address." Then there can be no mistakes of the kind referred to.

The sales manager himself is the organization. He is the vital factor. It is "sales that move the wheels of business" and he is directly responsible. He is the brains; he imparts energy to the sales force and keeps stock moving and sales ever on the increase. He is alive to every change of condition and quick to take advantage of new ideas and new systems that will better his force. It is the man himself. As one authority puts it, "It is not the size of the concern a man works for, but the size of the man himself."

"A good soldier makes a good officer." In these days of efficiency and competition a sales manager must be a man who has been through every phase of the business from the logging end to the collections and credits, and must understand the uses and needs of every remanufacturer of lumber. Therefore he must have served his time in the mill and on the road. These are not the only qualifications, but they are the most essential. Knowledge is the foundation.

He must be a leader and a judge of men. If salesmen realize that he has been in their position at some time or other, he knows the hardships, he understands conditions, they'll know he is not unreasonable in his demands. When he writes a letter to any of the "boys" it is not a cold-blooded proposition—it is a letter from one part of the unit to another. Not long ago a salesman passed a letter to the writer to read. It was from his sales manager. "Dear Jim," it started off, "that surely was a clean-up you made in the state last week. The best batch of orders you've sent in in a long time. Business conditions were rather favorable, of course, and I know it can't be done every week. But try hard, anyway. If you can keep up the good work, it's going to make a little 'fatter' check each week. Here's luck." That's a letter of heartfelt interest and the kind of appeal that produces results. Ever get a letter like that? Few of us have.

He never sends out a salesman without complete information. It was all very well in days of the past to get up a list of stock and prices and turn out the men to sell it. But it won't do now. At least it will not get results. A salesman must have detailed information as to the widths and the average percentage of lengths, condition of stock for dryness, something about the texture and any other points that create interest. This information must be kept right up-to-date. It involves a lot of detail work, but it pays in increased sales. A salesman can then deal in facts—not general points. It makes a better impression on the customer, too, for he

knows that he is buying lumber of a definite value.

When a salesman knows that there is interest in him and his work it puts added interest in his own efforts. This added interest does much to create enthusiasm. Enthusiasm goes a long way in success.

Naturally the sales manager is in charge of all answers to inquiries. There are two ways to answer an inquiry. One is a business getter and the other isn't. That's the difference. When you write a man, talk to him. Do away with all stereotyped phrases, such as "We are in receipt of your favor of the 11th. inst., and, etc." He knows you got the letter or else you would not be answering. Get down to business. Talk. Get personal. Use abbreviated words; it's proper and wins favor. Just imagine that John Miller of the Miller Furniture Company is sitting opposite you and that you are telling him about the car of lumber he has inquired for. Imagine, if you will, that your stenographer is Mr. Miller. Talk to him. Use his name throughout the letter. That's the kind of letters that pull results. The formal letter for sales work was doomed a year or so ago. But few have caught onto it, however.

Advertising is part of organization. Lumbermen are just realizing that advertising and salesmanship go hand in hand and that one reinforces the other. No, not the old standing-card style of—here, now follow closely—you have some oak to sell. Now just imagine all the prospective buyers of oak standing before you for you to address them. Take them collectively; imagine them all as one person. Now talk about your oak. Tell how dry it is, describe it, suggest uses, bring in all your selling points. Then ask who is interested. Tell them to write or wire you! That's the way to write advertisements that sell goods. Now if others can do it (and they are doing it right now), you can. Why, right now you are probably running a standing card in some paper. People see the same thing year after year and there is nothing to attract them or to induce them to investigate further. But suppose you change your copy every issue. Have a new story about your products. Why, the readers will begin to look for your ads every time the paper comes out. You hear lots of men say, "No, I never read the ads in the trade papers; there's nothing new in there." That is—because for a great many years the trade newspaper had no real advertising. And some of the aforementioned still think there is none in them to this day. You know yourself that when you read a popular magazine you spend most of the time looking over the advertisements to see what is new. Well, that is just what the buyers of lumber are doing and especially now, when stock is scarce.

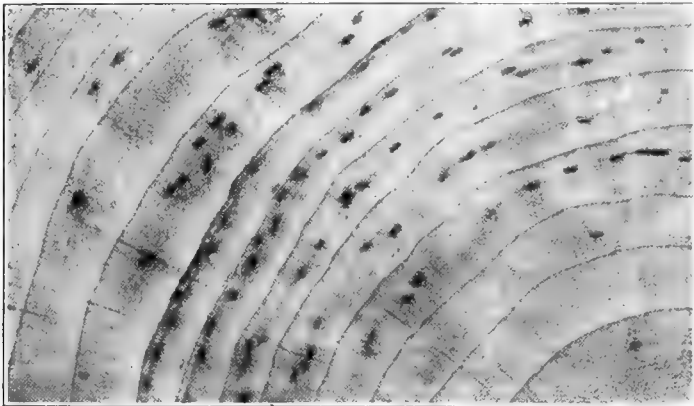
But to get back on the original topic. Sales efficiency doesn't stop at mere sales. Service is a new and all-important item today. Not only service in shipping, but service as to information, questions and adjustments. When an inquiry is received it should be answered immediately. If it cannot be answered right away, then it is up to you to write the inquirer, explaining why and also when he can expect to receive it. Most sales offices quote a price and then stop right there. If the order comes in, all right. If it doesn't, well—they wonder why it hasn't. The writer has always followed the plan

of holding back one or two selling points as "clinchers," then following up by telegraph, telephone and personal visit (provided the inquirer is within reasonable distance; that there is a chance for the order and the profits would warrant the expense). He finds the telephone the most valuable asset in getting business. Some sales offices, in answer to an inquiry, say that their representative will call shortly. That is very nice, but who is that representative and when does he expect to get there? Yet some wonder why the orders are placed before they can get to that town. Answer inquiries quick! Answer specifically. Send a copy of the original quotation to your salesman on that route.

Your salesmen should have copies of every letter, order, etc., that relates to customers in their respective territories, even to collection letters. A salesman cannot give you proper representation unless he is fully informed at all times. In the same way, the salesman should report to the office any points about his customers that will be of interest to the sales manager. Whether the customer is busy, whether he runs his plant on a scientific basis, his habits and other little points that will help toward judging a man's character and the extent of the line of credit to him.

The sales manager is the life blood of the business. Some men in that capacity have doubled the sales of their concern. Others, and there are a good many today, are putting their company in a bad way for future business. If your sales are falling off, ask yourself the following questions: Is it because of business conditions? Have we the stock to sell? If you can answer those with satisfaction, then ask: Have I the right sales manager? Is he an organizer? A business getter? Does he play teamwork with the entire organization? Does he inspire enthusiasm, optimism and aggressiveness? Is he alive to my interests, the customers' interests and the betterment of all? Does he understand every detail of the business and keep thoroughly posted? If these questions are not answered and in keeping with the man himself, you had better replace him.

Yet, do you know that some concerns take a clerk and put him in that position? What does he know of salesmanship, credit extension, trade conditions, uses of stock and business management. You might



CROSS SECTION OF A WOOD SHOWING PITH FLECKS, NATURAL SIZE

as well put a station agent in the cab of an express train. Both are out of place and create chaos.

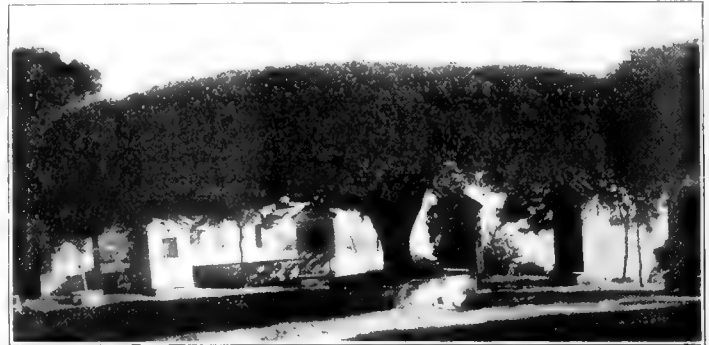
It is not meant from the foregoing that the sales manager is to be set up as an ideal and to get all the individual credit. The only credit a man of this type should get is that he is an organizer. As such the whole concern is a unit for one purpose. And his supreme duty is to keep the concern as a unit.

In closing the writer would like to repeat a statement of Roy Johnson that appeared in Printer's Ink a short while ago. He says, "The most perfect organization is that in which the purposes of the individual are submerged for the time being, in the purposes of the whole. Kipling's story of the 'Ship That Found Herself' is the best illustration of it that I know about. When this ship started on her maiden voyage the plates and the rivets and the beams each took credit for keeping her from sinking. Then the steering gear, the

engines and the steam each demanded acknowledgment that but for them she wouldn't get anywhere. By-and-by, after a severe pounding and wrenching in the heavy cross seas, they came to the understanding that not one of them could accomplish a thing without the rest and a new personality came into being, 'We are the ship.'"

An Italian "Stone Oak"

The accompanying illustration of an Italian "Stone Oak" shows the peculiar form which is given the tree by pruning. It is made to grow in the shape of a millstone, hence the name. The crown of this particular specimen is about one hundred and twenty feet across, and it is nicely balanced on its comparatively slender trunk. The species is probably *Quercus robur*, the tree known in commerce as English oak. Though the spread of its branches is wide, it is greatly exceeded by some of the live oaks of the southern states, or the valley oak of California. It is claimed that the oak shown in the picture is a thousand years old, but this figure should be accepted with caution.



PICTURESQUE ITALIAN "STONE OAK"

Pith Flecks in Wood

The small brown spots one sees so commonly on the cross sections of certain woods like gray, red, and paper birch and soft maple are known as pith flecks. On the surface of a board these pith flecks appear as narrow brown bands running lengthwise. Sometimes on the smooth end of a log they may be counted by the hundred, though often they are very irregularly distributed.

While pith flecks are found in a great many woods, it is to be noted that such woods are diffuse-porous, and rather fine-textured. In addition to the birches and maples just mentioned they occur frequently in willow, service-berry or shad-bush, mountain ash, alder, hawthorne, and certain smaller forms of wild cherry and plum trees. They are rarely found in sugar maple or in black or cherry birch.

These pith flecks are not natural to any wood. They are caused by the larvae or small grubs of certain moths. The moth deposits its eggs in the bark of a tree and as soon as the larva hatches out it gets into the soft cambium layer between the wood and bark and works its way up and down the stem. The flat tunnel it leaves is soon filled up by the growth of other cells into it. These filling cells are not fibrous like the rest of the wood, but are more like pith and the formation that results shows up prominently, due to the darker walls of the cells.

The Forests of Louisiana

The Forest Service has issued bulletin 114, dealing with the forest resources of Louisiana. The study on which the report is based was made by J. F. Foster, chief of state co-operation, who spent several months in different parts of the state, collecting data, observing conditions, and compiling statistics. His figures ought to come nearer giving correct information than any report in the past. Mr. Foster estimates that the total timber stand in the state is 119,800,000,000 feet, of which 52,500,000,000 feet is longleaf pine, 15,200,000,000 feet shortleaf and loblolly, 15,700,000,000 feet cypress and 36,400,000,000 feet hardwoods.

Various phases of the timber situation are considered. Forest fires do immense injury to young growth though not much harm to mature

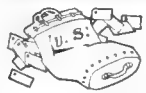
trees, because the fires are slow and seldom burn through the bark of old trunks. When the longleaf pines are toxed for turpentineing they become liable to great injury by fire. Much of the burning of wood lands is done intentionally to improve the range for pasture. The waste is great in hardwood lumbering operations where long hauls render it unprofitable to take out any but the best logs. In the manufacture of crossties and staves the West runs very high.

Cut of Northern Manufacturers

Reports based on statements of fifty-four members of the Northern Hemlock and Hardwood Manufacturers' Association show that there was a decrease in the total cut, October, 1912, as compared with October, 1911, of 21 per cent, with an increase in total shipments

during the same period of 23 per cent. The year showed a falling off in the hardwood cut of 7 per cent and an increase in hardwood shipments of 32 per cent. The cut of hemlock during the year decreased by 29 per cent and hemlock shipments increased 19 per cent.

Total cut of hemlock lumber during October, 1912, was 25,199,000 feet, as against 35,489,000 feet October, 1911. The cut of ash October, 1912, was 226,000 feet, and for October, 1911, was 427,000 feet. The basswood cut this year was 1,725,000, as against 1,766,000 last year. The birch cuts were, respectively, 2,983,000 feet and 3,698,000. The elm cuts were 962,000 feet October, 1912, and 553,000 feet October, last year. Maple showed a decided falling off during the year, the cut decreasing from 4,237,000 to 2,868,000. Thus the total cut of hardwoods in October, 1912, was 806,000, and in October, 1911, it was 10,144,000.



The Mail Bag



Any reader of HARDWOOD RECORD desiring to communicate with any of the inquirers listed in this section can have the addresses on written request to the Mail Bag Department, HARDWOOD RECORD, 537 South Dearborn Street, Chicago, and referring to the number at the head of each letter and enclosing a self-addressed stamped envelope.

B 346—Measurement of Hardwood Flooring and Parquetry Strips

Baltimore, Md., Nov. 6. Editor HARDWOOD RECORD: There are several points in connection with the manufacture of hardwood flooring on which we find some diversity of opinion. If possible, would like to have you straighten this matter out by giving us expert opinion.

FIRST: Kindly advise if there are any books that treat on the subject of hardwood flooring.

SECOND: In the grading of flooring, in what is termed clear plain sawed, does this permit of any pin worm holes, or must it be absolutely clear?

THIRD: In measuring parquetry strips, is the measurement the actual face, or is allowance made for saw kerf and jointing?

— COMPANY.

The writer has been advised that the only book that has been written treating exhaustively on oak flooring is the work entitled "Oak Flooring" written by H. H. Gibson, and published by HARDWOOD RECORD in 1910. He is advised that of all this edition, which involved ten thousand copies, very few are in the market, but possibly a copy can be obtained from the Oak Flooring Bureau, Hammond building, Detroit, Mich., which purchased a large portion of the edition.

Second: Clear plain sawed oak flooring does not permit of any pin worm holes, and should have an absolutely clear face, but one-fourth of an inch bright sap is permissible.

Third: All thin square edge parquetry strips are measured and sold on face or net surface measure, with nothing added for waste. This, it is believed, is the universal method of measuring among manufacturers of parquetry flooring. In tongued and grooved hardwood flooring the usual practice is to make an allowance of three-quarters of an inch for saw kerf, jointing, tongue and groove, but a few manufacturers still make a practice of selling this product on face measure basis, naming an additional price to cover the waste. —EDITOR.

B 347—Seeks Locust or Osage Orange

Wyoming, N. J., Nov. 7.—Editor HARDWOOD RECORD: I am anxious to find a locality where a monthly supply of 125 cords of either yellow or black locust or osage orange (Bois d'Arc) timber can be obtained for some years. Will you kindly advise me of a source of supply?

The writer has been advised of a probable source of supply for both black locust and osage orange.—EDITOR.

B 348—Seeks Oak for Bending Purposes

San Francisco, Cal., Nov. 4. Editor HARDWOOD RECORD: Will you kindly give us a source of supply for white oak suitable for bending purposes, Indiana stock preferred?

To the writer of the above letter several suggestions have been made as to a source of supply for the type of oak that can be handled satisfactorily under steaming for bending purposes, and a specific list of manufacturers given, who should be able to deliver oak of the desired quality.—EDITOR.

B 349—Comparative Qualities of Red Spruce and White Ash

Chicago, Ill., Nov. 5.—Editor HARDWOOD RECORD: Will you kindly supply us with an analysis of the comparative strength and stiffness of spruce and ash?

— AEROPLANE COMPANY.

The above correspondent has been supplied with the following information pertaining to the comparative strength and stiffness of the two woods named, as follows:

WOOD.	BREAKING STRENGTH.
Red Spruce.....	7,470 pounds per sq. inch
White Ash.....	8,610 pounds per sq. inch

STIFFNESS.

Red Spruce.....	1,099,870 pounds per sq. inch
White Ash.....	1,016,680 pounds per sq. inch

Weight of Spruce per cubic foot, air dry—28.57 pounds.

Weight of Ash per cubic foot, air dry—40.78 pounds.

Strength of Spruce per pound weight of wood—261.5.

Strength of Ash per pound weight of wood—211.13.

Elasticity of Spruce per pound weight of wood—38,500.

Elasticity of Ash per pound weight of wood—24,920.

Pound per pound, spruce is twenty-four per cent stronger and fifty-four per cent stiffer than ash.

These calculations are based on Hough's factors. He does not state in what region his specimens grew.—EDITOR.

B 530—Specifications for Cedar Fence Posts

Toledo, O., Nov. 5.—Editor HARDWOOD RECORD: Are there any published rules covering specifications for cedar fence posts?

HARDWOOD RECORD knows of no set of association rules that covers specifications on cedar fence posts, but Cobbs & Mitchell, Inc., Cadillac, Mich., one of the most careful concerns in the United States on grading of both lumber and other forest products, sells its posts on specifications which from their fairness would likely be acceptable and satisfactory to the trade at large.—EDITOR.

These specifications follow:

All posts to be round and 8 feet long. Posts may be 2 inches scant in length if otherwise satisfactory. All posts cut from live timber and properly peeled.

Tops to run from 3½ to 7 inches in diameter after peeling with not to exceed 15 per cent under 4 inch.

Posts to be reasonably straight and to contain no short crooks nor reverse curves. Both ends to be square trimmed.

Pipe rot is admissible and rot or hollow heart in the butt may be allowed under the following restrictions:

Posts with 4 inch tops admit butt rot up to 1 inch diameter, 5 inch tops admit butt rot 1½ inch diameter, 6 and 7 inch tops admit butt rot 2 inch diameter. Posts having tops less than 4 inches in diameter must have sound butts. No ring rot shall be allowed.

B 354—Information on Precious Woods

San Francisco, Cal., Nov. 10.—Editor HARDWOOD RECORD: Can you tell me where I can secure data upon the following matters: Amounts of lignum-vitae, mahogany, black walnut, prima vera, genezero and rosewood used annually in the eastern markets; the average prices that wholesalers pay for them in the logs, and the names of the principal dealers and consumers; also the same information for Spanish cedar. Can you give me information as to the relative demand for these woods and whether there is a scarcity of supply or well supplied market? How is most of the timber shipped to the Chicago market?

— LUMBER COMPANY.

This inquirer has been informed that the costly foreign woods brought into this country are seldom listed separately but are grouped as cabinet woods. For this reason it is next to impossible to secure figures for separate woods. The world's market for costly woods is London. Large dealers in this country go or send there to make their purchases. Much mahogany and Spanish cedar, however, is shipped directly to the United States without passing through London.

The use of lignum-vitae is limited and its total import is so comparatively small that it

does not constitute a matter of record. A fair estimate of the mahogany import into the United States places it at about 40,000,000 feet annually, while black walnut is still produced in the United States to the extent of about 30,000,000 feet annually, about one-half of which is exported, largely to Germany, and the remainder employed in this country. Prima vera has a limited demand but does not constitute an item of enough importance to be separately listed in imports. Rosewood importation is comparatively unimportant although in the aggregate considerable finds its way into high-grade work.

Genezero is another name for white mahogany. It is cut in South America and Central America and has about the same commercial value as mahogany. It has been imported through the ports of San Francisco, New Orleans and New York for about thirty years.—EDITOR.

B 351—Wants Dimension Stock

Evansville, Ind., Nov. 16.—Editor HARDWOOD RECORD: We are in the market at all times for kiln-dried plain oak, birch and maple dimension stock in 1 inch and 1 1/4-inch thickness, both solid and glued-up. We should like very much to have you advise us, if possible, the names of manufacturers of this kind of stock.

—COMPANY.

The above concern has been referred to several sources of supply for the material sought.—EDITOR.

B 352—Wants Market for Apple Wood

Van's Harbor, Mich., Nov. 14.—Editor HARDWOOD RECORD: We have about twenty cords of 4-foot apple wood and would greatly appreciate any information you can give us which would indicate a market for this stock.

This company has been supplied with a list of possible users of this wood.—EDITOR.

B 353—Report of National Hardwood Lumber Association for October

HARDWOOD RECORD is in receipt of the following letter showing the record of inspection

by the inspection bureau of the National Hardwood Lumber Association for October, 1912:

Chicago, Nov. 14. Editor HARDWOOD RECORD: We enclose statement of the inspection bureau for the month of October, 1912, showing 19,189,975 feet inspected under the bonded certificate during the month, which is an increase of 4,343,500 feet over October, 1911. During the months of August, September and October, 1912, the total amount inspected is 58,171,517 feet, a gain over the same period of 1911 of 18,619,027 feet, or an average monthly gain of over 6,000,000 feet. This volume of work for October was accomplished with earnings of about \$300 in excess of the actual expense.

Since our letter of Oct. 15, seven new applications for membership have been received, bringing the total number of new members admitted since the convention to fifty-one.

At a meeting of the executive committee, held at the association headquarters on Oct. 24, it was decided to call a meeting of the inspection rules committee, shortly after Jan. 1, 1913, in order that the final recommendations of the inspection rules committee be placed in the hands of all members as far in advance of the sixteenth annual convention as possible. While Section 2, Article IX, in the by-laws, provides only for notice to the membership of proposed changes of not less than thirty days, it is the intention of the executive board to give members as much additional time as possible.

You are invited to submit any suggestions you may have to offer for the improvement of the service, and we trust the figures presented in this letter, which indicate general satisfaction with the inspection department, will meet your approval.

F. F. FISH, Sec'y Treas.

B 355—London Importer Wants Oak

London, Eng., Nov. 12. Editor HARDWOOD RECORD: We are anxious to get into touch with manufacturers of oak lumber in West Virginia, Virginia, Kentucky, etc. Can you assist us in our quest? We are able to use considerable quantities in various grades of the article in question, and will appreciate any assistance which you can give us.

This firm is one of the leading lumber importers of London and has been supplied with the above information.—EDITOR.

meeting a vote was taken on several proposed amendments to the by-laws of the club.

The following amendments were carried by the necessary two-thirds vote:

A new section to article II, of the constitution, to be known as "section 2," to read:

Section 2—All persons eligible to membership in the Lumbermen's Club, as provided in the foregoing section, living outside the city of St. Louis, shall be eligible to membership in this club, with all the rights and privileges of other members, except voting. The dues for such auxiliary members shall be \$1 per month.

Section 2 of article IV of the constitution shall be amended to read as follows:

Regular business meetings of the club shall take place on the second Tuesdays of January, March, May, September and November; but the executive board shall have the power to change such time of regular meeting, or call a special meeting at any time at their discretion.

A new section to article I of the by-laws, to be known as "section 3," to read:

Section 3—All resolutions or other matters that do not come under the head of any standing committee shall be submitted in writing and referred to a special committee for action, which committee shall be appointed by the chair.

The matter of the meeting of the National Federation of Retail Merchants, to be held here Nov. 19-22, was brought up by Julius Seidel. He suggested that the club entertain them and made a motion, which was carried, that a fund be subscribed.

President Rolfes stated that P. F. Cook had asked the well known attorney, Judge O'Neil Ryan, to welcome the National Federation of Retail Merchants to the city, and Mr. Cook was given a vote of thanks.

Two nominating committees, one selected by the chair and the other from the floor, were named to select candidates to be voted on for the various offices of the club at the election in December. Stephen J. Gavin, George R. Hogg and Thomas J. Nosor were named by the chair, and R. S. Price, W. W. Dings and Julius Seidel from the floor.

Meeting of New York Association

The New York Lumber Trade Association held its annual meeting and election at its headquarters, 18 Broadway, on Nov. 13, there being about one hundred members in attendance. The meeting was preceded by the usual luncheon.

The date of this meeting marks the completion of the association's twenty-sixth year. During the year just closed it has continued its good work. All of the officers of last year were re-elected, as follows: Russell J. Perrine, president; John S. Steeves, first vice-president; Charles F. Fischer, treasurer. Four new trustees were elected, namely: C. V. Bossert, J. F. Murphy, Charles Crabbe, G. M. Stephen, Jr.

President Perrine resumed the chair after the election and gave a short talk of appreciation of the new honor. He stated that one reason for association work is to preserve the value and integrity of the lumber business by eliminating from the inside dishonest methods and conditions and from the outside oppression. He stated that associations have proved their usefulness and established their permanency and they have fairly demonstrated their necessity to the lumber business in the same capacity that the clearing house acts for the banking business.

A special committee reported a resolution in memory of the late James H. Pittinger, who was for many years prominent in the affairs of the association and at one time its president.

Of special interest to the meeting was an address by A. B. Cruikshank, counsel for the Eastern States Retail Lumber Dealers' Association in the suit which the government has brought against that organization and its affiliated organizations. The speaker reviewed the case in detail from beginning to date, and his remarks were listened to with close attention.

It was voted to hold the regular annual banquet, the date to be decided upon by a special committee in due course.

The report of the trustees showed in detail the workings of the credit system which has done



News Miscellany



With the Chicago Club

A success from its inception, the Lumbermen's Club of Chicago has on every hand justified the claims of its organizers since its organization last spring. It was rather expected, as is the usual thing in a new organization of this sort, that the membership would fall off when the second assessment of dues was levied the first of September, but the actual results were decidedly to the contrary, the membership now being greater than at the end of the first six months of the club's life. To its able president, E. A. Lang, assisted by the energetic and competent house committee, is due entire credit for the maintenance of the actively interested spirit of the members.

An extensive program of entertainment has been provided, which will run through the winter. One of the last and most successful of the entertainments was "Dutch Night," given two weeks ago. At that affair the feature was the German band gotten up by some of the leading entertainers in the club.

The next function will be a semi-glee club affair, given by a choir of twenty male voices, to be designated as the Dearborn Chorus, which will

be made up entirely of members of the club. This affair will take place Saturday night, Nov. 30, and will undoubtedly achieve the same success as have previous functions.

On Saturday, Dec. 7, "Swedish Night" will be celebrated, at which Swedish songs and stories will be rendered.

E. E. Skeele, formerly chairman of the house committee, recently resigned from this office, A. C. Quixley being chosen in his place. Mr. Quixley has reorganized that committee, apportioning to various members different departments of the supervision of the club.

Meeting of St. Louis Lumbermen's Club

The November meeting and dinner of the Lumbermen's Club was held at the Planters' hotel on Nov. 12, President Rolfes presiding. After a few preliminary remarks on the important matters which were to come up later in the evening, the speaker of the evening, Rev. Martin S. Brennan, was introduced and gave an address on the wonders and mysteries of The Starry Heavens. The address was listened to with much attention.

The business part of the evening followed. After the reading of the minutes of the October

so much for the members. The trustees also reviewed the government case, and their report shows that the officers of the association are confident as to the result of the suit. The trustees' report stated that the suit has been pending in the United States District Court for the southern district of New York since May, 1911, and reviewed the proceedings in the suit.

The substance of the petition upon which the suit is based is that the retailers' association is an organization in restraint of trade. The combination complained of is the agreement or understanding among the dealers to prevent wholesalers from selling to their customers. According to the petition, every effort of the retail lumbermen to prevent wholesalers selling to their customers in any manner is illegal and the object of the petition is to obtain an injunction forbidding such action. There is no question of prices in the case and it has nothing to do with local arrangements existing in some of the associations, but is confined entirely to the question above stated.

The defendant association contends that there has been no combination of any sort except to distribute the official lists, which is merely information to which the subscribers have a right, and that even if there were such a combination it would not be in restraint of trade, but, on the contrary, would be a regulation of business for the benefit of trade.

Researches by the defendant's counsel have revealed many cases in which similar questions have come up for decision, and in the majority of the arguments the defendants have been upheld. Thus it would seem that, while there are conflicting decisions upon the subject, the weight of the authorities is in favor of the defendant association.

New Pittsburgh House

C. E. Breitwieser & Co. is a new hardwood concern which has opened up for business on the eighth floor of the Bessemer building. "Charlie" Breitwieser, head of the concern, is one of the best and most favorably known lumbermen in Pittsburgh, having been for many years identified with the May Lumber Company on the north side. The active manager of the office business will be A. G. Breitwieser, formerly of the Breitwieser Lumber Company, who has twenty-five years of lumber experience in Pittsburgh behind him. The firm has secured some splendid agencies for hardwood and cypress and will make a specialty of the latter stuff.

Tariff League Proposes Uniform Classification

On Nov. 14 the National Industrial Tariff League met at the Hotel La Salle, Chicago. One of the most important questions of discussion was an act which has been passed by the United States Senate, and is now before the House, which if enacted would give the Interstate Commerce Commission control over classification matters, and would very likely result in the adoption of uniform classification.

The classification committee of the league reported very unfavorably on this measure, and suggested to the members of the league that in place of supervision by the Interstate Commerce Commission, a committee of from nine to fifteen members be inaugurated with the idea of equalizing as far as possible the various classifications which are now in effect in the three territories—Western, Official and Southern. It was not recommended, however, that complete uniform classification be effected. Such a committee, according to the report, should be continuous and should be composed of railroad experts.

A discussion of the report of the legislative committee brought out some sentiment in favor of uniform classification, but decidedly the majority of the members were strongly opposed to it. The committee's report was finally adopted.

On motion, the legislative committee was instructed to do everything possible to prevent the

passage by the House of Representatives of the proposed bill, which is known as Senate Bill No. 6093.

The Interstate Commerce Commission has had authority to suspend classification, and has already suspended western classification No. 51, but under present laws it has no authority to consider the question of uniform classification.

Discussion on freight storage, export demurrage, demurrage rules and storage charges were also inaugurated.

An Old Friend in a New Guise

The trade needs no introduction to J. H. P. Smith, lately of the Hardwood Lumber Company of Cincinnati, O., as a personality; but there may be a few who have not heard of his latest move in the lumber business, which connects him with the great Babcock Lumber Company interests of Pittsburgh. On Nov. 12 Mr. Smith opened an office at 1656 McCormick building, Chicago, to handle the entire business of that big firm in the Chicago territory. Mr. Smith will cover southern Wisconsin and Michigan, northern Illinois, Ohio and Indiana. He has evidently com-



J. H. P. SMITH, IN CHARGE NEW CHICAGO OFFICE BABCOCK LUMBER COMPANY, PITTSBURGH, PA.

pletely recuperated from his recent serious illness and, judging from the rush with which he has been going after and securing business, there is no doubt of his fitness.

The Babcock Lumber Company is planning extensive increases in its operations. Its already immense sawmill at Tellico Plains, Tenn., will be doubled within a year, while at the Sewell, W. Va., mill work has already been started, which will result in doubling the capacity of that plant.

The coupling of J. H. P. Smith's personality and ability with the Babcock interests should certainly result to the great mutual advantage of both parties.

With the Manufacturers' Association

Under the progressive administration of President DeLaney of the Hardwood Manufacturers' Association of the United States, another department called the development bureau has been added. This new work will be in charge of Edwin E. Myers, who took charge Nov. 18. Mr. Myers is a trained newspaper man, having been with the Cincinnati Enquirer as financial editor for a number of years. Plans have been formulated by which through this department the association expects a much enlarged membership. H. C. Hoover, assistant secretary, is to be in charge of general office affairs, and Secretary Doster will spend practically all of his time on the

road. Mr. Doster has been on a trip visiting association mills in the Mississippi valley, and has met President DeLaney, who has also been in southern territory during the past week on association business, at New Orleans, where they attended the meeting of the Southern Cypress Manufacturers' Association, held there Nov. 20.

The association has just issued a report on conditions as reported by members covering transactions for the month of October. It is to be considered a supplement to "Market Conditions" issued in October and covering September conditions. The new report condensed is a verification of the last issue, as very few changes are noted regarding either prices or demand, all mills reporting either fair or good demand. In many cases list prices are being obtained. Reports show that very few concessions were made on any item, and a number of items are reported as selling at better prices than the figures in last report. Reports also show that the demand has been even better during October than was reported during the month of September, which was considered one of the best months this year. All reports indicate a continuation of present good business, and members are planning accordingly.

To Begin Operations in New England

The New England Hardwood Company of Wilmington, Vt., is just now preparing to begin operations as successor to the Deerfield Lumber Company. The authorized capital stock of the new company is reported as \$300,000, of which \$100,000 is said to be paid in. It is reported that the company has acquired a large amount of timber rights and purchases; it has bought the standing timber on a large tract of land of the Deerfield Lumber Company with its twenty-five years' right to remove.

The New England Hardwood Company is fitting up its mill with new machinery and is preparing to do a large volume of business. Herbert S. Jones is president and Gardner I. Jones secretary of the company.

Baltimore Exchange to Meet

The annual meeting of the Baltimore Lumber Exchange will be held on the evening of Dec. 2 at the Merchants' Club. Yearly reports will be read by officers and the various committees, and statements of the activities of the Exchange in the matter of inspection and other details will be submitted. Officers will be elected for the ensuing twelve months, the following ticket having been put up by the nominating committee:

PRESIDENT—Theodore Mottu of Theodore Mottu & Co., renominated.

VICE-PRESIDENT—Ridgeway Merryman.

TREASURER—Luther H. Gwaltney of the American Lumber Company, renominated.

MANAGING COMMITTEE—William M. Burgan; Joseph D. Virdin, Canton Lumber Company; George B. Hunting, N. W. James Lumber Company; George E. Waters, George E. Waters & Co.; John H. Geis, John H. Geis & Co.; John L. Alcock, John L. Alcock & Co.; Henry C. Matthews, Thos. Matthews & Son; Rufus K. Goodenow, Canton Box Company; Edward P. Gill, William D. Gill & Son; Parker D. Dix, Surry Lumber Company, and Lewis Dill, Lewis Dill & Co.

The managing committee elects the secretary later. This office has been filled during the past year by Mr. Gwaltney, and there is no reason to expect a change. There is also every reason to assume that the ticket named will be successful. After the business session a fine dinner will be served. The monthly meeting of the managing committee will take place in the afternoon on the same day at the rooms of the exchange on East Fayette street, when the work preliminary to the annual meeting will be cleared away. The past twelve months have been very prosperous, and the reports are expected to reflect the feeling of satisfaction entertained by the membership.

Meeting Philadelphia Lumbermen's Exchange

The regular monthly meeting of the Lumbermen's Exchange of Philadelphia was held on Nov. 7, William T. Betts, president, in the chair. On motion of Ralph Souder, chairman of the legislative committee, a resolution was passed stating that the Lumbermen's Exchange of Philadelphia is in full sympathy with the resolution adopted by the Atlantic Deeper Waterways Association at New London, Conn., on Sept. 6.

An invitation from the National Rivers & Harbors Congress was received, requesting that delegates be sent to the next convention, to be held at the New Willard hotel, Washington, D. C., Dec. 4, 5 and 6. President Betts appointed the same committee to represent the exchange which attended the convention last year.

Memphis Lumbermen Discuss Excessive Insurance Rates

The lumbermen of Memphis will continue to fight the present alleged excessive rates on lumber insurance. This subject has been discussed at all the recent meetings of the Lumbermen's Club of Memphis and at the last one, held Nov. 8, the following resolutions were unanimously adopted:

WHEREAS, We are informed that several neighboring states, through the activities of the insurers, obtained state rating boards and enjoyed material reduction in almost every case where rates were excessive and out of proportion to other communities, and

WHEREAS, From the best information obtainable, we find that our insurance rates are excessively high, in proportion to the losses in this territory and further believing that the experience on the insurance carried on lumber should be published so that equitable rates on lumber of this class could be based in accordance with this experience; be it

RESOLVED, That the meeting appoint a legislative committee to investigate and confer with a delegation of the state legislature, preparatory to passing a law that will equalize insurance rates on lumber districts with those north of the Ohio river.

These resolutions were offered by James E. Stark, who said that he learned enough to lead him to the belief that rates were out of all proportion to the risk involved. He asserted further that he believed it possible to secure lower rates and expressed the belief that it was very poor business for the lumbermen to continue to pay present rates if it were possible to obtain lower ones. C. W. Holmes thought it was possible to secure lower rates also, especially if the proper efforts were put forth to that end. Some of the other lumbermen joined in the discussion, and it was declared that rates were so high that, if something were not done, it would be impossible for some of the yard men here to continue operations. After adopting the foregoing resolutions the club added J. E. Stark and J. M. Pritchard to the law and insurance committee, which has charge of this matter. This committee is composed of J. V. Rush, chairman, F. E. Gary, W. E. Nickey, J. R. Bailey and Sam Burgess.

The club, at the request of the Lumbermen's Club of Nashville, instructed the secretary to write to the National Wholesale Lumber Dealers' Association, requesting that it hold its next annual meeting at Nashville. This action was taken.

There was also some discussion of the question of exchange on checks sent in payment for lumber. This matter will probably be further considered at a later meeting. Nothing definite was done.

Philadelphia Lumbermen in Golf Tournament

Through the courtesy of William T. Betts, Horace A. Reeves, Jr., and Eugene W. Fry, who are members of the Philadelphia Cricket and Golf clubs, the Philadelphia Lumbermen's Golf Club held its last tournament and meeting for the season at the famous Philadelphia Golf Club grounds with its eighteen-hole course, St. Martins, Pa., Nov. 12. The weather was ideal for golf and the day's sport was particularly animated.

The golfers were divided into three foursomes, one threesome and two twosomes for the conquest, which began for new honors at 12:30 p. m.

The first foursome, composed of Frank Buck, president of the club, with Eugene W. Fry, vice president, as partner, and Horace A. Reeves, Jr., and Ralph Souder, four of the crack a-jack wielders of the driver and the putter, laughingly contested for first place, and throughout the game there was considerable good natured bantering and teasing back and forth, which only added new zest to the game. The play resulted slightly in favor of the last two named in the net score, but Buck and Fry won out in best ball. An amusing incident which will be appreciated by all amateur golfers occurred in the game played by the popular vice-president of the Lumbermen's Exchange, Benjamin Stoker. Although only his second game among older and experienced players, Mr. Stoker, nothing daunted, pluckily plunged ahead, but alas, he had not anticipated one of those swear provoking positions which are so familiar to the golfer, and when the like ill luck befell him, unaware of the rules of counting, he began vigorously to swipe at the ball, and not until the caddie, who mentally kept count, in a loud voice called out seventeen, did he realize his mistake. However, no one enjoyed the joke more than did Mr. Stoker, who spared not himself in the least. Another laughable affair was a strictly good natured jest which William Meyer played upon his friend, B. S. Gill. Mr. Meyer introduced Mr. Gill, a new member, to the club, and wishing him to stand well in the limelight (?) with the golfers, had only a twenty handicap placed to his name, taking at the same time (twenty-five for himself. Gill having only played two games in his life, naturally is a novice, while Mr. Meyer has been playing for three years, hence the absurdity of the handicap appears. Meyer won second prize, but all honor to Gill, for in spite of the figures so kindly placed, he nearly beat Meyer out, which quite turned the tables on his jocose friend.

At 6:45 p. m. a dinner to tickle the palate of an epicure was served, after which the meeting was called to order by President Buck. As Secretary Ben C. Currie was absent, the minutes of previous meeting were omitted. H. G. Parker was elected a member of the club at this meeting, which makes the required membership of fifty complete. The remainder of the evening was devoted to various social amusements. The prize winners were: John E. Howes, first prize, a beautiful cut-glass fern dish; William Meyer, second prize, a large hammered brass jardiniere; J. E. Troth and Frank E. Schofield each won a handsome electric desk lamp for best ball. Mr. Schofield had second lowest net score, but according to the rules of the club, could not receive two prizes. The organization of the Philadelphia Lumbermen's Golf Club has proved one of the most successful social ventures in which the lumber trade has ever embarked. The enthusiasm evinced by the members and which increases at each meeting and tournament augurs well for its progress and interest for 1913.

St. Louis Furniture Board of Trade Presented with a Token

At the October meeting of the St. Louis Furniture Board of Trade, its secretary, Henry M. Holtgrewe, president of the Missouri Furniture Company, presented to that association a handsome gavel. The gavel is a remarkable piece of workmanship in every particular. The woods employed in making it are both foreign and domestic. The body is of rosewood, each end having a star inlaid with hard white maple. The barrel is profusely engraved, the upper band showing a forest, the felling of trees, logs, sawmill, lumber yard, seasoning and curing of lumber, a furniture factory and a retail furniture store. The lower band is engraved with allegorical figures representing shields, with exquisite fancy scrollwork. The rest of the gavel is decorated in an equally tasteful way. The engraving was done by A.

Buchner of St. Louis, and occupied over one hundred hours of his time.

To Mr. Holtgrewe the club is indebted not only for the gavel but for the entire design, which he thought out carefully and planned in consultation with the engraver. The gift is highly appreciated by his fellow members of the board, who passed motion providing a box for the preservation of the gavel.

Second Growth Forest

Dr. C. A. Schenck of the Biltmore Forest School, who is well known to many lumbermen in all parts of the United States, has issued a third and much enlarged edition of his book, "Biltmore Lectures on Silviculture," which was first published in 1905. This book, which in its new form contains over two hundred pages, deals primarily with the growing of timber. He calls his book "The Art of the Second Growth." It contains much information concerning the kinds of trees suited to various situations; and owners of cut-over lands, as well as those who may wish to plant timber on worn out farm lands, will find much valuable information in this book.

More of the International Lumber and Development Company

The International Lumber and Development Company, whose mendacious methods have been exposed in the columns of the HARDWOOD RECORD at various times, will be tried before a Federal jury on Dec. 10, on the charge of using the mails to defraud. Three additional bills of indictment were returned by the Federal grand jury on Nov. 13 against Charles McMahon, John R. Markley, Isaiah B. Miller, Henry A. Merrill, William H. Armstrong, Sr., William H. Armstrong, Jr., and Albert G. Stewart, officers of the company, all of whom were indicted in June. This company was formed seven years ago and capitalized at \$6,500,000 for the purpose of developing plantation and other timber tracts in Mexico. In the charges the government alleges that the company sold more than \$6,000,000 worth of stock, on which \$1,500,000 was paid in dividends. It is further alleged that these dividends were paid out of the money received for stock instead of the earnings of the company, and that very little had been done by the concern in the way of developing the property.

Action Against Railroads

The National Lumber Exporters' Association intends to ask for a rehearing in the case against the Kansas City and Southern Railroad and other lines running into New Orleans in connection with the variation in the rate from points in Louisiana to New Orleans on lumber and logs intended for the domestic trade as compared with the rate on lumber and logs for the export business. The difference in the rate is now two cents per 100 pounds, and the petition of the National Lumber Exporters' Association to have the rate equalized was rejected by the Interstate Commerce Commission at Washington. Just what reason will be urged for a rehearing has not yet been determined, but the commission in its action overlooked several points, any one of which may be taken up. It is suggested that the exporters have always been willing and now pay for any extra switching that may be done if a shipment is diverted from its original destination, but they maintain that they are not on equality with the domestic trade, which gets the benefit of delivery at any point designated free of charge, though, of course, a shifting to another point entails a special tax. The exporters contend that their requirement to have export lumber and logs delivered at the docks of steamers which are to take the shipments is in effect like the delivery at any point designated by the domestic trade, and that the rates should be the same in both instances because there is no difference in the character of the service.

The annual meeting of the National Lumber Exporters' Association will take place Jan. 23 and 24, 1913, at Chattanooga.

Wood Exports and Imports for September

The monthly summary of this country's exports and imports for September, 1912, issued by the Department of Commerce and Labor, makes the following showing for wood and manufactures of wood:

Exports of American woods, September, 1911, \$7,112,470; September, 1912, \$8,008,104; re-export of foreign woods, including reeds and rattans, September, 1911, \$58,268; September, 1912, \$108,833; shipments to Alaska, September, 1911, \$30,754; September, 1912, \$48,846; shipments to Hawaii, September, 1911, \$133,756; September, 1912, \$206,492; shipments to Porto Rico, September, 1911, \$124,559; September, 1912, \$143,664; shipments to the Philippines, September, 1911, \$1,638,024; September, 1912, \$2,006,963; shipments to Tutuila and Guam, September, 1911, \$4; September, 1912, \$470.

Death of John K. Sowers

During the past week a gloom was cast over lumber circles when John K. Sowers, president of the Sowers-Leach Lumber Company, of Columbus, Ohio, was found dead in bed at his home, 33 S. Ohio avenue, with a bullet wound in his head. It was first surmised that Mr. Sowers had committed suicide, but the conditions of his life both financially and domestically would not warrant the committing of such an act.

Mr. Sowers was in Columbus practically all of his life, having come here from Champaign county. He entered the employ of the Cross Lumber Company in the capacity as bookkeeper when quite a young man. He continued in this for a short time and then decided to branch out for himself. He became associated with W. Smith in the lumber business under the name of the Sowers-Smith Lumber Company. He later became a partner with B. F. Leach, who was his partner at his death. He was forty-one years of age, and was widely known and well thought of in lumber circles.

Mr. Sowers is survived by a wife and a son, Joseph, and two brothers, Daniel and Emory, of this city. The funeral was held from the residence Nov. 18, and burial was made at New Philadelphia, the former home of his wife.

Will Obtain Credit Information

The board of managers of the Bureau of Information of the National Wholesale Lumber Dealers' Association, with headquarters at 66 Broadway, New York City, has just sent out a circular letter to the membership of that association with the object of providing a means whereby all the members of the credit department may be immediately advised of any accounts in which the members of the association should know they are interested. With this end in view, the members are requested to file with the managers a confidential list of their customers. The managers pledge themselves that this list will be seen by no one but themselves. The letter states that each day a large amount of information of various degrees of importance comes to the bureau covering slowness in making settlement, complaints of various causes, notices of removals and similar information which may not be of so general a character as to warrant its being sent out in the weekly report sheet, but which might very properly be submitted specially to all those members whom the bureau is advised may be interested. An instance in which information of the kind solicited would be of use is seen in the event that a single complaint comes in from one member only, while other members selling might be interested to get in touch with the complaining member and thus cooperate and keep fully advised as to the conditions of each individual case.

Few American Pianos in England

In 1911 the United Kingdom imported 18,508 pianos, valued at \$2,733,712. The point of interest to Americans is that few of the pianos were made in this country. Germany supplied most of the instruments. The manufacturers in that

country seem to have a firm hold upon lovers of music in Great Britain. It might naturally be asked why England does not make its own pianos, since it is a highly developed manufacturing country. To make 18,508 pianos in England would require 3,000 workmen one year. Their wages at \$9.73 a week would amount to \$1,459,950, or more than half of the total value of the finished product, and to compete with Germany is impossible. It would be interesting to know what the labor bill would be if those instruments were made in the United States.

A Big New England Hardwood Operation

The Ray Lumber Company of Brownville Junction, Me., has been busy for the last five months constructing a modern hardwood plant at that place. It is expected that the company will be ready to operate by the first of January. The plant will be the largest hardwood mill in New England. The Ray Lumber Company owns in fee about 80,000 acres of timberlands in the state of Maine. The company will manufacture bobbins, spool wood and squares, and any other product of hardwood for which it can contract in large quantities.



McGARVEY CLINE, RETIRING DIRECTOR
FOREST PRODUCTS LABORATORY

A Loss to the Forest Service

The Forest Service will lose one of its most valuable and valued members on Dec. 1, at which time McGarvey Cline, director of the Forest Products Laboratory at Madison, Wis., will sever his connection with that institution to go into consulting work. Mr. Cline has been head of the laboratory since its construction about three years ago, and the success with which he has handled the affairs of that institution, working under the difficulties with which he has had to put up, has made his value to the lumber trade and to the Forest Service exceptional.

Under a recent change in the policy of the Service, the branch of products will be eliminated and the laboratory will be put under the branch of silviculture.

Mr. Cline will be succeeded by H. F. Weiss, who has been assistant director and who has had charge of the branch of timber preservation. In this line Mr. Weiss is probably without an equal in the country, having made this work an exclusive study. Mr. Weiss comes in well equipped to handle the affairs of the institution, and undoubtedly will continue its successful operation.

Biltmore Doings for October

The monthly bulletin showing the doings of the Biltmore Forest School, issued at present from Darmstadt, Germany, has arrived. The

school had a successful voyage, leaving Hoboken, N. J., on the Holland American Line. The usual lectures were carried on during the voyage.

The school first went to the Odenwald, a hill country situated between Rhine, Main and Neckar. The students stayed at Dr. Sebenek's old home at Lindenfels, where they became acquainted with the different types of forests there prevailing, known as the state forests, communal forests, and the private or family forests. The students enjoyed a surprise in the general adoption of American white pine for afforestation on lands where other native species would not grow. The wonder arose as to whether the time would ever come when America would have to go to Germany for American white pine.

In studying the interesting operations around Lindenfels, the school was surprised to note that destructive methods of lumbering were employed entirely. However, within a year or two after cutting the areas are entirely replanted. A clean cut in this territory yields about \$300 net per acre, while \$15 per acre will cover the expense of complete reforestation.

It is distinctive of German forestry that while there is plenty of timber, not more than a limited quantity is cut annually, consequently the market is never overstocked and the price of timber is maintained at a high level. Stumpage in the woods fetches about the same price in Germany that the manufactured lumber brings in America delivered to the consumer.

Contrary to the prevalent idea, there is no one type of forestry employed in German forests. Each forester, whether employed by state, family, or municipality, has to face conditions of his own and must solve the problem placed upon him.

Since Oct. 1 the students have been established at Darmstadt, which will be their address during the entire winter.

Tests of California Redwood

The Forest Service has issued circular 193, dealing with the mechanical properties of California redwood. The bulletin is the work of A. L. Heim, engineer in forest products, at the Madison, Wis., laboratory. A summary of strength tests shows that in bending and compression at right angles to the grain, redwood is about four-fifths as strong as Douglas fir or southern longleaf pine, while in shearing strength and compression parallel with the grain, for clear, small specimens Douglas fir and redwood are practically equal. In some instances redwood rated above Douglas fir on specimens four inches square and sixteen inches long.

Convict Help in the Woods

A new method of solving the labor question and at the same time clear off considerable valuable land which otherwise would remain as cut-over land was introduced by the state authorities in the Adirondacks recently. Eighteen thousand acres of land adjacent to the state prison at Clinton, N. Y., will be cleared by convict help. The work will be started immediately. It is planned to first cut 2,000,000 feet of timber burned over in 1908 and in addition, to market about 8,700 cords of poplar pulp-wood. There are on this tract some 12,470,000 feet of standing live timber, 7,030,000 feet of green hardwood and considerable pulp and fuel wood. The tract will be re-forested along the lines already started. There have been 180,000 trees of white and Scotch pine set out already.

Acquittal for Louisiana Disturbers

A. L. Emerson, president, and seven members of the Brotherhood of Timber Workers, who had been on trial at Lake Charles, La., on a charge of murder in connection with the riots at Grabow, have been acquitted. The jury took but an hour to arrive at a decision. Immediately after the acquittal, Emerson resumed his work for the strengthening of the whole of the union in that territory. He has announced that he

will hold frequent meetings in various parts of the state. The lumber manufacturers are well prepared to combat the spread of the anarchistic and socialistic ideas of the organization, and are also guarding their properties carefully to prevent any repetition of the disaster at Grabow.

Wood By-Products

Excelsior has largely taken the place of straw for packing purposes; wood flour, ground from spruce or pine sawdust, is one of the ingredients of linoleum and dynamite, and ropes made of wood fiber are coming into use in packing and shipping furniture and other commodities. However, ropemaking from bark is no new thing. Negroes in the South used basswood bark and hickory withes for mule harness long ago; and the Indians of the Far Northwest make all sorts of ropes, cords, baskets, wallets, and blankets of the bark of cedar, while teamsters on the mountain roads of California often use cedar and redwood bark as a covering to keep down the dust.

A New Idea in Stumping Lands

A concern in Spokane, Wash., the Economy Stump Burner Company, is responsible for a new and ingenious idea to facilitate the destruction of stumps on cutover lands. The company manufactures a machine which bores a hole through the center of the stump down and another slanted hole from the surface of the ground into the stump, meeting the vertical hole. The first hole is supposed to furnish a draft. In the slanting hole an oil burner is inserted which is equipped with a wick so that the burning can be regulated as desired. The burner is fed with oil from a cup on the outside of the stump, the flow of oil being carefully regulated so that it works down into the roots. After ignition is complete the burner is removed. It is necessary to prevent the top of the stump from being ignited as long as possible so as to concentrate the heat in the lower part.

It is estimated that each one of these burners will use from one to three cents worth of oil in destroying each stump.

Hints on Fire Risks

The usual line of good advice and pertinent suggestions regarding the proper maintenance of woodworking plants so as to insure as low a fire insurance rate as possible, is contained in bulletin No. 59, just issued by the Lumbermen's Underwriting Alliance of Kansas City.

In the bulletin it is shown that while adjustments have not been completed, the October losses for the company will total about \$19,500, making the aggregate to date for the year a little more than \$100,000. The bulletin takes the opportunity of congratulating its subscribers on the small loss ratio for the first ten months of the current year, it equaling less than one-fifth of the annual premium deposits.

Subscribers are warned against too great a feeling of security on account of favorable weather conditions, which would lead them to a laxity in cleaning methods or failure to supplement the watch service in times of special hazard.

It is noted that most of the fires during the month occurred between Oct. 21 and 28, at which time a dry, warm and windy spell prevailed pretty generally. A gratifying testimonial to the efficiency of fire-fighting facilities of the subscribers is seen in the early control of the conflagrations after their incipency.

Subscribers are warned against laxity in the inspection of steam jets in kilns. It has been the experience of the Alliance that probably twenty-five per cent of the kiln and fuel house fires resulted from the impossibility of working steam jets when it was necessary. The automatic jet is strongly recommended.

A hazard in commissaries was noted in several instances. In one case a pile of hose in a warehouse was discovered ablaze, and upon investigation after the fire was extinguished it was found

that a rat had made its nest in the coil of hose and had there accumulated quite a store of matches, which, of course, resulted in a blaze. It is suggested that the current supply of matches, as well as the reserve stock, should be kept in tightly closed receptacles which can not burn or be gnawed.

The hazard of smoking on plant premises has received very general attention, and fewer cases of violation of rules are now reported by field men. Careless use of matches is a menace, however, which is not being generally well safeguarded. It seems to be a frequent practice of workmen to carry matches loosely about their clothing, and in many instances these are dropped onto the floor, where they might very readily start trouble.

An unique fire took place in an Indiana building recently, at which time a small blaze was discovered in the eaves. A bird had picked up a lighted cigarette butt in the street and had flown with it to its nest in the building, from which a half dozen other nests were ignited.

Defective flues are responsible for a large proportion of fires at commissaries, offices, hotels and dwellings, and it is urged that all flues be built of brick from the ground up. A brick flue built on a bracket is by no means safe as the inevitable settling of the building, even though slight, is very apt to crack the mortar and leave openings for sparks to escape between the roof and ceiling. Bracket flues, however, can be safeguarded by thorough cleaning and by closing with mortar any cracks or openings from which sparks might be diverted.

Wooden Pavement for Belgrade

A side light on the war in the Balkans gives the information that the streets of Belgrade, capital of Serbia, are to be paved with wood. The streets were torn up when war was declared, and the workmen dropped their tools and took up the implements of war, leaving the streets impassable. It is reported that the labor of laying the wooden pavement will be performed by women.

Miscellaneous Notes

The Herrick Casket Company of Lyons, Mich., is closing out its business at that place.

The Thomas Furniture Company is incorporated at Pontiac, Mich., with a capital of \$25,000.

The West Virginia School Furniture Company has moved from Logan, W. Va., to Huntington, W. Va.

The Carter Furniture Company has been incorporated at Sanford, N. C., with \$125,000 capital.

A. H. Marsh has recently begun business at Asheville, N. C., as a wholesale hardwood lumber dealer.

The Southern Hardwood Lumber Company has been incorporated at Barton, Ark., with a capital of \$25,000.

The Hardwood Finish & Supply Company has been incorporated at Los Angeles, Cal., with a capital of \$50,000.

The Jay Manufacturing Company of Jay, Me., has been incorporated at \$10,000 for the manufacture of novelties.

The mills of the Woodstock Lumber Company of Woodstock, N. Y., were burned recently with a loss of \$100,000.

The Pioneer Furniture Company of Eau Claire, Wis., has increased its capital from \$75,000 to \$150,000.

The Ozark Lumber & Construction Company has been incorporated at Harrison, Ark., with a capital of \$25,000.

The Evansville Desk Company, Evansville, Ind., is planning an extensive addition to its already large factory.

The Hardwood Mill and Lumber Company of Lena, Ark., is about to establish a new plant for the manufacture of pencils.

The Wisconsin Chair Company, Port Washington, Wis., announces an increase in its capital stock from \$500,000 to \$700,000.

The Varner Land and Lumber Company has removed from Altheimer, Ark., to Geridge, Ark. The postoffice address is Stuttgart.

It is announced that the Standard Veneer and Door Company, Beallville, Ind., has planned to erect a \$12,000 addition to its plant.

The Boyce Lumber & Realty Company has purchased a tract for \$5,000 near Alfalfa, La. The company has a mill at this place.

The Muskegon Veneer Furniture Company has been incorporated at Muskegon, Mich., with a capital stock of from \$50,000 to \$100,000.

The Hughes Manufacturing & Lumber Company of Los Angeles, Cal., has sold out to the Southern California Hardwood & Manufacturing Company.

George R. Fuller and G. T. Johnson of Oakland, Me., will shortly erect a new plant at that place for the manufacture of broom handles and chair stock.

E. Stringer Boggess, wholesale lumber dealer of Clarksburg, W. Va., has filed schedules in bankruptcy, showing his assets to be \$13,591.61 and his liabilities \$49,504.05.

Fire of unknown origin burned to the ground the \$10,000 heading plant of the Moscow Co-operative and Lumber Company at Moscow, Tenn. The plant was insured for \$4,000.

The Crescent Furniture Company of Evansville, Ind., will shortly begin the erection of a four-story furniture factory at that place which will cost in the neighborhood of \$18,000.

A dry-kiln and 325,000 feet of lumber belonging to the John L. Roper Lumber Company at Oriental, N. C., were recently destroyed by fire, and the green lumber shed was partly destroyed.

The plant of the American Panel & Lumber Company of Newport, Ark., has been purchased by a syndicate of Kalamazoo, Mich., men who will remodel it for the manufacture of veneers.

Fire which started in the finishing room of the Clio Manufacturing Company, maker of kitchen cabinets and tables at Clio, Mich., destroyed the entire plant. Loss, \$12,000; insurance, \$4,500.

The Alta Vista Consolidated Furniture Works have been taken over by a syndicate of residents of Alta Vista, Va. The plant will be remodeled and upon completion will be opened to operate as the Evans Company.

The Butler & Langerin Company has started business at Lansing, Mich., with \$25,000 capital.

The Nelson-Jacks Lumber Company was recently incorporated at Shreveport, La., with a capital stock of \$25,000.

The new addition to the plant of the Breece Manufacturing Company, manufacturer of panels at Portsmouth, O., will shortly be completed. This addition embodies a building of brick construction 50x100 feet in dimension.

Spontaneous combustion was declared to have been the cause of the fire which recently destroyed the Anacoco Lumber Mills at Grabow, La. Until recently this plant was the property of the Galloway Lumber Company and was the scene of the labor riot in which four men lost their lives.

In future the office of the Norfolk Lumber Company will be located at 245-9 East One Hundred Thirty-seventh street, Borough of the Bronx, New York, where the company has opened a warehouse.

J. R. Shoupe & Co. of Longview, Tex., will soon open a lumber yard at that place, where they will handle both pine and hardwood as wholesalers and retailers. They will also continue their wholesale hardwood business as heretofore.

It is with deep regret that the death of Joseph Gardner, head of the firm of Joseph Gardner &

Sons of this city is announced. Mr. Gartner's firm has extensive hardwood connections in the United States and in addition has a sawmill at Memphis. He was everywhere known as a keen businessman, with large philanthropic connections, and will be greatly missed.

The citizens of Stoutsville, Mo., have donated the old pottery grounds and \$500 in cash as a bonus in order to bring the handle factory from Huntsville to Stoutsville, where it will be closer to very large tracts of timber desirable for its special purposes.

The St. Francis Box and Lumber Company has recently been incorporated at St. Francis, Ark., with a capital stock of \$20,000, by Thomas S. Marshall, president; Ella M. Marshall, vice-president; Wood Howe, secretary, and C. E. Horne, treasurer.

The Henderson Desk Company of Henderson, Ky., will shortly move its operations to Evansville, Ind., where it will occupy the old plant of the New York Dimension Company, Florida and Vaughan streets. This company manufactures all lines of office desks.

The Oak Lumber Company, Jane Lew, W. Va., has recently been incorporated at \$10,000 by I. J. Davis of Syles, W. Va.; W. A. Jackson, D.

L. Bryan and B. M. Davison of Jane Lew, W. Va.; and S. G. Jackson of Clarksburg, W. Va.

T. J. Spraggins & Son, Fenwick, Miss., have just contracted with the Honochitto Lumber Company of Bude, Miss., for the sale of all the hardwood timber on their lands, which is estimated at about 100,000,000 feet. The Honochitto company will do its own logging in connection with its pine operations.

The sawmill of the Texas Lumber & Manufacturing Company at Honey Island, Tex., has again resumed operations after a two weeks' idleness during which dry-kiln repairs were effected. It is planned that the manufacture of hardwood will have a more important place in the company's business in the future than it has in the past.

At a meeting on Nov. 4 of the creditors of the Loyd G. Harris Manufacturing Company, St. Louis, in the office of Walter D. Coles, referee in bankruptcy, George McBlair, secretary of the Lumbermen's Exchange of St. Louis, was elected trustee of the company. The schedule filed by the company showed assets of \$24,217.98 and liabilities of \$71,358.58, of which \$32,290 is represented by secured claims consisting in the main of notes held by the Third National Bank for money advanced.

years. Mr. Zodikow was president of the corporation.

The Merston, Eddy, Parker Company, Saginaw, Mich., announces the appointment of D. J. Lagatree as manager of the local sales office at 1 Madison avenue, to succeed the late H. W. Alexander, who died Oct. 19. Mr. Lagatree has been with the Merston, Eddy, Parker Company for nineteen years, during which time he has served them in all capacities. His appointment as manager of the local office assures to the local customers of the trade the continuation of the efficient services which the company has always aimed to render.

William A. Bennett of the well-known Cincinnati hardwood house, Bennett & Witte, was a visitor in the Metropolitan district last week.

F. E. Parker of the Merston, Eddy, Parker Company, Saginaw, Mich., who has been at the local office of the company, returned home last week.

Charles Milne of Milne Brothers Company, 18 Broadway, is out of the city for a short stay.

The Hill & Neumann Company has been incorporated in Jersey City, N. J., and succeeds the firm of Hill & Neumann, formed a few months ago. V. J. Hill, A. Wm. Hesz and Anthony Neumann are the incorporators.

George H. Storm, head of George H. Storm & Co., local hardwood flooring specialists, returned from a short hunting trip in the Adirondacks.

The local trade was shocked at the news of the death of Thomas T. Reid, who was connected with the lumber business of the Metropolitan district for many years. Mr. Reid was president of the Dunbar Box & Lumber Company. Death occurred Nov. 17. He was fifty-eight years old.

On Nov. 10, Mr. Reid was injured in an automobile accident while driving a new car in his home town, Montclair, N. J. Mr. Reid was trying out the new machine, and while descending a hill the machine crashed into an electric light pole and he was thrown out. His brother, Hugh Reid, hurried to the scene and took Mr. Reid to a doctor's office, where his injuries were found to be serious, though hope for his recovery was manifest. It was reported last week that Mr. Reid's condition was improving but slowly, and his many friends in business and private life felt that he would recover. On Nov. 17, while the family were at dinner, Mr. Reid left his bed and went to an upper porch of the home, where he committed suicide by shooting. Death was instantaneous.

Mr. Reid was a member of many clubs and was an enthusiast of golf. He was a member and ex-trustee of the New York Lumber Trade Association.

Hardwood News Notes

CHICAGO

Houghton & Gillespie is the style of a new firm incorporated in Chicago to do a wholesale lumber and veneer business. The concern is located at 1146 West Lake street and is capitalized at \$5,000.

Thomas McFarland, well known in hardwood circles as a wholesale handler of hardwood lumber at Cairo, Ill., was one of the recent visitors to the local trade.

J. C. Turner of the J. C. Turner Lumber Company, New York City, who is prominently connected with the cypress business, stopped off in Chicago on Nov. 11 en route to his cypress mills in the South.

Nils Dueholm of the Scott & Howe Lumber Company, Ironwood, Mich., was in this city on Nov. 13.

J. M. Wells, sales manager for the Sherrill-King Mill & Lumber Company, Inc., Paducah, Ky., and former sales manager for the Lucas Land & Lumber Company of that place, spent several days of last week in this city on a selling trip.

F. F. Fee, president and manager of the Fee-Crayton Hardwood Lumber Company of Dermott, Ark., was in town on Nov. 14 and 15. Mr. Fee is optimistic about the future of the lumber business.

S. L. Eastman of the S. L. Eastman Flooring Company of Saginaw, Mich., was in Chicago one day last week.

W. H. Shippen, president of the Shippen Brothers Lumber Company of Ellijay, Ga., stopped off in town Tuesday of last week.

F. R. Gadd, vice-president of the Wisconsin Lumber Company, Chicago, has been at the southern mills of that concern for several weeks.

S. P. Coppock of the S. P. Coppock & Sons Lumber Company, Fort Wayne, Ind., made a short visit to the local trade during the week.

C. B. Allen, manager of the veneer department of the Anderson-Tully Company, has been in town for several days and has been a frequent visitor to the Lumbermen's Club.

A. J. Cross of the Monadnock block, Chicago, who succeeded his father, the late C. L. Cross, is enjoying a three weeks' visit to the cypress mills in the South.

George Strable, vice-president and general manager of the Strable Manufacturing Company, manufacturer of hardwood lumber and maple flooring, Saginaw, Mich., was in the city on Thursday, the 14th.

W. E. Trainer of the Trainer Brothers Lumber Company of Chicago has just returned from a week's visit to the hardwood mills in the Memphis territory, where he reported considerable difficulty in securing any adequate amount of stock.

C. H. Barnaby of Green Castle, Ind., was in Chicago last week in conference with Secretary-Treasurer F. F. Fish of the National Hardwood Lumber Association, of which Mr. Barnaby is president.

Ralph McCracken of the Kentucky Lumber Company, Cincinnati, O., was in the city several days of last week.

The General Wood Turning Company has been incorporated at Chicago with a capital stock of \$750,000. This company will manufacture pedestals.

E. L. French of the Hollister-French Lumber Company was in Chicago on November 12.

The year book for 1912 of the National Wholesale Lumber Dealers' Association, 66 Broadway, New York City, is just off the press. The little volume is an abstract of about all that is worth knowing about this most excellent lumber organization, including lists of officers and committees and a roster of membership.

John Shafer, brother and associate of Cyrus C. Shafer of South Bend, Ind., was in town Wednesday of last week.

NEW YORK

Maurice J. Breen has been appointed receiver for the Hoboken Planing Mills Company, plant at 507 Newark avenue, Hoboken, N. J. The company gives its assets at \$35,000, and it is stated that its liabilities may reach \$50,000.

L. Zodikow, Inc., manufacturer of parlor suite frames, at 334 Stanton street, New York City, was petitioned into bankruptcy on Nov. 11. The company was incorporated in January, 1912, with a capital stock of \$10,000, and succeeded Ludwig Zodikow, who had been in business for many

A new hardwood firm has been organized in this city and incorporated for \$50,000. The name is Miller, Sturm & Miller, and the members are George B. and William P. Miller and Elmer J. Sturm, all of whom have been connected with the hardwood trade here for a dozen years or more. Mr. Sturm and W. P. Miller have been with the former Empire Lumber Company and then with the late F. W. Vetter, and G. B. Miller has been with the O. E. Yeager office. On Dec. 1 the Vetter yard will be taken over by these young men, who will add largely to the present stocks. They have a large acquaintance both with lumbermen and lumber buyers. Their friends in the trade and among consumers wish them much success.

The Wall brothers have formed a new company to take over their holdings of British Columbia timberlands, in which they have become interested to quite an extent, having recently made new purchases there. They have formed the Seneca Timber & Lumber Company, with an authorized capital of \$100,000. The directors are J. B., T. H. and W. M. Wall.

President W. L. Sykes of the Emporium Lum-

BUFFALO

ber Company was one of the attendants and also a speaker at the Watertown, N. Y., meeting of the Empire State Forest Products Association.

T. H. Wall has been on a hunting trip with other Nimrods to the far north of Ontario, Canada, and reports that the game is ample enough to pay for a vacation tour to that part of the world.

B. E. Darling of Blakeslee, Perrin & Darling, has lately been making a visit to a number of southern mills, looking after shipments of lumber purchased there some weeks ago.

The yard of O. E. Yeager is getting in some good-sized stocks of oak and cypress. There is no indication of any fall in hardwood prices and trade is holding up well this month.

J. N. Scatterd is very busy getting ready for the further proceedings for the Terminal Commission, expecting that the decision on its constitutionality will be decided in its favor.

R. D. McLean has returned from a business trip to New York. The McLean yard has been adding plain and quartered oak and is now carrying a stock of good proportions for the winter.

F. M. Sullivan has been spending some spare time hunting this month and has found some good territory in western New York. He is receiving some one- and two-inch oak among other hardwoods.

A. J. Elias is one of the five delegates from the Chamber of Commerce to attend the Rivers & Harbor Congress to be held in Washington from Dec. 4 to 6 to discuss general waterways improvement.

Anthony Miller has been receiving supplies of oak and other hardwoods lately, and states that the hardwood trade, while not very strong, is still quite satisfactory this month.

The yard of H. H. Salmon & Co. is taking in a large amount of Michigan hardwoods by lake and will receive a barge from Lake Superior next week with 1,500,000 feet more.

PHILADELPHIA

The Baldwin Locomotive Works is being rushed to the limit. An order was recently received from the Chicago, St. Paul, Minneapolis & Omaha Railroad for twenty-nine switching locomotives, and scattering orders for four large locomotives. An order was also booked for fifty consolidated locomotives for the Boston & Maine Railroad, delivery to be made in the early spring of 1913. The British steamship Shimosa, for Japan, will include in its cargo eighteen locomotives for the Imperial Railway of Japan, built by the Baldwin works. This concern is building a new locomotive for timber hauling, the details of which will undoubtedly be of interest to the lumber manufacturers and will be given out in the near future.

Arthur W. Kent, secretary and treasurer of the J. S. Kent Company, recently returned from a trip through the southern lumber camps, where he succeeded in making some desirable deals. He reports increased trading and looks for a good winter business. Thomas B. Hoffman of the hardwood department is scouring the South for stock.

Howard B. France, secretary and treasurer of the Monarch Lumber Company and of the Had-dock-France Lumber Company, visited the mill at Sterling, N. C., and reports the plant rushed to the extreme. If the winter keeps open continued good trading is predicted.

Daniel B. Curll is on a trip to North Carolina and Tennessee, closing some desirable deals. He has just made a contract for 6,000,000 feet hemlock, 500,000 feet oak, 500,000 feet chestnut and considerable poplar.

F. X. Diebold, president of the Forest Lumber Company, reports undiminished activity. Orders are accumulating, and the mill at Konnarock, Va., is worked to the limit getting out stuff. The company recently engaged R. W. Watts, formerly with Beecher & Barr, as salesman to cover the Cumberland valley district.

The J. A. Finley Lumber Company, wholesaler, 342 Land Title building, was chartered under Delaware laws Nov. 12. Its capital is \$50,000. J. A. Finley, who was formerly of the Hardings-Finley Lumber Company, and prior to that with Owen M. Bruner Company, and one of the best-known young lumbermen in the East, is president; W. L. Eliason, a builder of this city, secretary, and L. L. Maloney, a Wilmington, Del., banker, treasurer. They will do a wholesale business handling long and shortleaf Southern pine and maple flooring.

J. Randall Williams, Jr., of J. Randall Williams & Co., says they are getting excellent business. The uncontrollable car shortage is the only trouble they have to contend with.

W. H. Wyatt of the Jackson-Wyatt Lumber Company says he has no complaint to make in the way of business. The interrupted shipping is the only difficulty. W. A. Jackson is in the South looking after some delayed orders and hunting a new supply of stock.

The Maryland Land and Timber Company, Wilmington, Del., was chartered under Delaware laws, Nov. 12; capital is \$100,000.

PITTSBURGH

The Pittsburgh Retail Lumber Dealers' Association banqueted the Pittsburgh Wholesale Lumber Dealers' Association at a quarterly joint meeting at the Hotel Henry, Nov. 12. President E. M. Diebold of the retailers was toastmaster. Addresses were made by L. L. Barth of the Edward Hines Lumber Company of Chicago and Walter Faulkner of Pittsburgh.

Louis Germain, Jr., president of the Germain Company, has taken on a new partner in the person of Dorothy Dill of Neville street, Pittsburgh. The wedding occurred in St. Paul's Cathedral Nov. 14, and the couple will reside, after a tour of the eastern cities, in the Albine apartments in Ellsworth avenue.

The American Lumber & Manufacturing Company has decided that trade is about as good in hardwoods as it ever is in this district. Manager Brown of the hardwood department returned a few days ago from a long trip through the Kentucky and West Virginia mill districts and found stocks very small and prices very firm.

Joseph J. Linehan believes that purchasing agents of industrial corporations and especially of hardwood manufacturing concerns, will, as a rule, buy much more lumber for 1913 than they did for 1912. They are already putting in bigger requisitions, and, furthermore, do not seem to hesitate about the slight advance in prices, he says.

J. N. Woollett, president of the Aberdeen Lumber Company, is unloading a big barge of gum and cottonwood at Joppa, Ill., for distribution throughout the middle states. He will shortly load another barge on the lower Mississippi. He reports that there is some dropping off in the trade with wagon makers, but that the box trade is unusually good.

F. R. Babcock of the Babcock Lumber Company has no fear of any break in business as the result of the election. He believes that the Democrats will move slowly and that business will go on very much as if no election had been held.

The Thomas E. Coale Lumber Company was very busy last week and finds trade in general fair to good, with collections better. The Pittsburgh local market is not contributing its share of the business, however.

The Mutual Lumber Company announces that business is good and the great trouble is to get lumber moved after it has been bought and sold. Railroads are buying very largely the past month.

The Kendall Lumber Company is very busy at all its mills. There is no lack of enthusiasm among its sales or office force, for they feel con-

ident that present business conditions will continue for a long time.

Pittsburgh building fell off considerably in October, compared with October, 1911. There is quite a little house building in the outlying districts, but the city itself is doing very little building. Retailers report that the falling off in the home building has been definitely responsible for the apathy in their trade the past year.

The Balsey & McCracken Company is getting things nicely organized at its office in the new First National Bank building, and I. F. Balsey is feeling exceptionally happy over the big order for chestnut which came his way recently. The concern has some fine hardwood connections that will help it out considerably in the Pittsburgh market.

BOSTON

The Pope Lumber Company, Beverly, Mass., has been making extensive improvements to its wharf property in that city. When these improvements are completed the company will be better able to handle its arrivals of lumber.

Robinson Bramley, a woodworker of Lawrence, Mass., has filed a voluntary petition in bankruptcy. The assets and liabilities are small.

The Schmick Handle & Lumber Company has been organized at Waterville, Me., with a capital stock of \$100,000. The president is Wilson E. Schmick of Hamburg, Pa., and the treasurer is Charles J. Tobias of the same place.

The Wilson Lumber Company, Portland, Me., has recently finished unloading a cargo of cypress amounting to over 600,000 feet. This is one of the largest cargoes of cypress ever received at Portland.

William G. Barker and Dean C. French of Boston are among the directors named in the list of officers of the recently organized Bingham Lumber Company of Bingham, Me.

The Interstate Commerce Commission will hold a hearing in Boston Nov. 25 on the subject of weighing freight. This subject was the chief topic of discussion at the last meeting of the Massachusetts Wholesale Lumber Dealers' Association. At this meeting a committee was appointed consisting of Frank W. Lawrence, Charles S. Wentworth and Wendell M. Weston. This committee will present the claims of the lumber trade to the Interstate Commerce Commissioner. Several lumber dealers in Boston have important facts to put before the commission on this subject.

BALTIMORE

The R. K. Hartwell Company, with offices in the Keyser Building, Calvert and German streets, went into the hands of a receiver on Nov. 14. Richard K. Hartwell, the president, being appointed by the court to act in this capacity. Mr. Hartwell bonded in the sum of \$5,000. He was appointed on his own application, in which he contended that while the books of the company showed assets of about \$46,000 and liabilities of approximately \$38,000, the company was insolvent and the appointment of a receiver necessary for the protection of creditors. The company in its answer admitted the truth of the allegations, and the appointment of Mr. Hartwell followed. The corporation was formed more than a year ago to succeed R. K. Hartwell & Co. as a firm. It expanded, establishing a hardwood department.

Another concern in trouble is the Mount Winans Mill and Lumber Company, which conducted a yard at Mount Winans, just outside of the southwestern city limits. Application for the appointment of a receiver was made in the circuit court here on Nov. 15 by Thomas A. Charshee & Bro. The complainants declare they are creditors to the extent of \$169.04, and they allege further that the defendants owe other

debts and are insolvent. The Mount Winans company is said to be owned by Mr. Hartwell.

Articles of incorporation were filed at Dover, Del., on Nov. 12, for the Maryland Timber Company, which purposes to acquire timberlands and to develop coal deposits and other minerals. The capital stock is fixed at \$100,000, and the incorporators are H. Ralph Ewart, Clarence J. Jacobs and Harry W. Davis, all of Wilmington, Del.

Another new corporation is that of The H. B. Herring Company, which has just taken place, with H. B. Herring as president, and a capital stock of \$5,000. The new corporation has an office at 603 Phoenix building, German street, near Charles. Mr. Herring was for a time connected with the R. K. Hartwell Company. His company will handle hardwoods, as well as yellow pine and cypress.

George W. Eisenhauer of the Eisenhauer-Mac-Lea Company, who was brought home from Colorado quite ill, has improved considerably, and it is thought that he will be able to get out in a short time.

One of the visiting lumbermen here last week was John H. Burrell of John H. Burrell & Co., Liverpool, England. He was on his way down South from Canada, having landed at Montreal.

Another caller was C. F. Treadway of Sanford & Treadway, New Haven, Conn., who stopped in Baltimore on his way back from the South. Mr. Treadway stated that he had found mills everywhere short of stocks and oversold on practically all items in hardwoods, with the range of prices tending upward.

COLUMBUS

Innis Creighton, general sales manager for the W. M. Ritter Lumber Company (limited) of London, left for Liverpool, England, Nov. 16 after a visit to the Columbus office. He reports conditions in that country good in every respect.

L. B. Schneider, sales manager of John R. Gobey & Co., reports a good trade in all varieties of hardwoods. He says prices are ruling firm and the car shortage is slightly improved, and that it is about all that can be expected at this time of the year.

F. B. Pryor of the W. M. Ritter Lumber Company says that the volume of trade is fair in all grades of hardwoods. He says the stocks are broken but prices are holding up well. The trade between the factories and the yards are about on an equal. He says he looks for a continuation of the good business.

M. A. Hayward reports an active demand for all grades of hardwoods with prices ruling firm. He says the oak trade especially is progressive.

W. L. Whitacre of the Whitacre Lumber Company says that trade in hardwoods is not inclined to advance, owing to the cold weather setting in. Dealers are a little optimistic about stocking up during the winter and since the high prices are being well maintained.

R. W. Horton of the W. M. Ritter Lumber Company is in the East on a business trip.

A. C. Davis of the A. C. Davis Company says trade is good in all grades of hardwoods and that prices are holding up unusually well for the time of the year. He says the car shortage is not being felt so much.

CINCINNATI

U. A. Carrier, dealing mostly in cypress and yellow pine, says that he has been doing a splendid business, finding more difficulty in getting prompt shipments than selling stock. During the last couple of weeks shipments have been coming in faster and better service from the mills from now on is looked for.

Duhlmeier Brothers are doing a big business and are handling more red and sap gum this year than ever before. Will Duhlmeier is a firm believer in the future of red gum for interior finish and is pushing the wood hard for that pur-

pose. He claims that a number of architects whom he has requested to try out the wood have done so with more than satisfactory results in every case.

Ed Bradley of the E. C. Bradley Lumber Company states that his firm is doing a bigger volume of business than ever before. After going over his territory and finding business booming in all branches of the industry, he does not hesitate to say that while this has been a big year for the lumber business, the coming season will far out-reach it. All factories that he came in contact with are booked ahead well into next season.

Weaver Haas of the W. E. Heyser Lumber Company has just returned from a trip to New Orleans, where he closed a contract for the output of a big band mill in that vicinity for the next six months.

Charles McCall, manager of the Wm. H. Perry Lumber Company, states that his company is getting its share of the excellent business that is to be had by any one in a position to furnish quick shipments. The company has had excellent shipping facilities all season. It is doing a big business in red gum.

Harry R. Browne, often referred to as the yellow pine man of the hardwood club, says that it has been several years since business has been on such a firm footing as at the present time. While stocks have been hard to get all summer, he has been able to supply the trade in most cases, and while he has had to let a great deal of business pass by on account of the scarcity of yellow pine, he looks for a very healthy season to follow the present one.

TOLEDO

The Booth Column Company has never been as busy as right now. Although working to its capacity, the concern is now three months behind in its orders and new ones flooding the office with each mail. This concern was fortunate in having purchased and had delivered at its plant early in the spring a heavy stock of lumber. It has been using up this stock and still has a large amount on hand, thus saving the firm all difficulties over the car shortage situation. Orders have been especially heavy from the East and South, and the tendency is toward larger columns for exterior use. The Booth company has now on hand an extensive order for twenty-four-inch columns. Prices are a little stronger, the local company securing a fifteen per cent advance on special work. The company has recently been shipping quite a lot of its product to Cuba.

A meeting will be held in Toledo Nov. 20, which will be attended by representatives of the lumber and building interests of the state, at which time a complete draft of a mechanics' lien law, designed to be satisfactory to all interests, will be prepared. Building association representatives will be invited to attend the meeting. Heretofore the building associations have manifested an unfriendly attitude towards a mechanics' lien law.

The Dayton Lumber and Manufacturing Company recently purchased a new lumber yard located at May and Clinton streets, Dayton, O. This is one of three yards which the lumber company has leased for ten years and it was decided to purchase.

The Charles H. Campbell Furniture Company of Shelbyville has been taken over by E. M. Porter of that city and L. J. and Robert Hackney of Cincinnati.

The Hoosier Veneer Company and the Wabash Veneer Company, both located at Massachusetts avenue and Adams street, are completing extensive improvements to their plants.

With an authorized capitalization of \$10,000, the American Pipe Organ Company has been organized and incorporated at Anderson to manu-

facture pipe organs. Horace W. Sumner, Frank East, Frank Reynolds, Philip B. O'Neil, Michael W. Staub and Edward A. Wellens are interested in the company.

The property of Ford & Johnson, furniture manufacturers, with a plant at the state prison, Michigan City, has been ordered sold by the Federal Court on December 16. The sale will also include the company's real and other property in Chicago.

A. A. Barnes, president of the Udell Works, and other local business men have organized the Union Land and Timber Company, which will deal in timberlands. The company has been incorporated with an authorized capitalization of \$100,000.

James W. Clark, trustee for the Foster Lumber Company, has brought suit against the former directors of the company, asking judgment in the sum of \$50,000. It is alleged the directors used funds of the company for private use.

A meeting was held here Nov. 12 to discuss organizing a national association of kitchen cabinet manufacturers. Another meeting will be held here soon to perfect the organization. The meeting was called by L. D. Waters of the Hastings Cabinet Company, Hastings, Mich. A number of Indiana and Michigan manufacturers were present.

MEMPHIS

R. J. Darnell, R. J. Wiggs, Elliott Lang, R. H. Darnell and H. H. Darnell are the incorporators of the Batesville Gravel & Material Company, which is domiciled at Batesville, Miss. The capital stock is \$5,000. R. J. Darnell, Inc., is building a railroad running out from the main line of the Illinois Central from Batesville for the purpose of developing its timberland holdings in that section. The road is known as the Batesville Southwestern, and the new company has been formed in connection with the construction of this line.

An unusual development in the Memphis lumber market has been the receipt of a consignment of African mahogany logs by the Memphis Veneer & Lumber Company. There are about 100,000 feet of timber in the consignment, and this will be cut into lumber and veneers. James E. Stark, who is one of the officials of the Memphis Veneer & Lumber Company, says that this is the beginning of the manufacture of African mahogany in Memphis, and that other shipments will follow in rapid succession.

James E. Stark & Co. have recently bought considerable quantities of timber in Mississippi, which is being brought to Memphis, where it is being cut into lumber at several of the customs mills. Among the firms which are doing the sawing are McCollum Brothers, Moffat, Bowman & Rush, and Gibson & Whitaker. Mr. Stark has recently materially increased his yarding facilities in North Memphis, and as fast as the logs are converted into lumber in South Memphis the latter is being sent over the belt line to the yards of the firm in North Memphis. Mr. Stark believes that there will be a large business this winter, and he is making his plans accordingly.

The Missouri & North Arkansas will begin work shortly on the new shops which will be built at Harrison, Ark., at a cost of \$125,000. It is proposed to have these in operation by May or June of next year.

NASHVILLE

The Bonner Furniture Company is putting its new factory, at Charlotte avenue and Tennessee Central Railroad, into operation. The company has been delayed in starting operation on account of machinery shipments being slow arriving. The company operates by electrical power, having separate motors for each machine. A

substantial line of household furniture will be turned out.

Mr. Bigsby of the Bigsby Manufacturing Company, Decatur, Ala., one of the large manufacturers of hardwoods of north Alabama, was in Nashville recently. Mr. Bigsby is very optimistic in regard to the future of hardwoods, and said that high values were being realized by the Decatur trade.

The North Fork Lumber and Timber Company is the name of a new firm that has been organized at Jackson, Ky., composed of S. J. Young and W. L. Eversole. The company will operate mills at Yerkes, Ky. S. J. Young will be active manager.

The Louisville & Nashville Railroad is taking steps to build a branch from Iron City, Lawrence county, to Martin's Mills, Wayne county, a distance of about thirty miles. The branch is being built to reach valuable timberlands. Wayne county has some of the finest undeveloped hardwood forests in Tennessee.

The record of the building inspector of Nashville shows permits for improvements in the city for the first ten months of 1912 amounting to \$1,005,466, against \$1,113,754 for the corresponding period of 1911.

The Dickson Planing Mill Company, a well equipped company at Dickson, Tenn., has recently awarded a contract for remodeling two of its 30-foot kilns to Fitch H. Kelly, manager of the Memphis branch of the Grand Rapids Veneer Works.

W. V. Davidson, president of the Davidson, Hicks & Greene Company, left this week for Cocoa, Fla., to look over his property there. Mr. Davidson has a winter home in Florida, and will go there with his family later in the winter. His company is one of the largest hardwood operators in middle Tennessee.

The Interstate Commerce Commission will take up the hearing of the case involving overweights on car shipments of lumber at Memphis, Dec. 18. The Nashville Lumbermen's Club will send its traffic committee, composed of A. B. Ransom, chairman, G. A. Washington and Charles M. Morford, to Memphis to represent the club. Other local lumbermen will attend. The case is one of great interest to the lumbermen of this section.

The car situation continues to hamper the lumber business in this section. Lumber manufacturers and shippers are unable to get large supplies of logs that have accumulated along the lines of the different railroads to market, which interferes greatly with their ability to fill orders. Cars to move shipments out of Nashville can be secured in fairly satisfactory manner, but the manufacturers are now more anxious to get the raw material. Railroad officials of this section have again issued appeals to shippers urging them to cooperate with the railroads by prompt loading and unloading of cars, and not to order more cars than they can load promptly. They claim that all shippers have not been cooperating as they should in this matter.

LOUISVILLE

The annual meeting of the Louisville Hardwood Club was marked by the election of Edw. L. Davis to the presidency, succeeding T. M. Brown of the W. P. Brown & Sons Lumber Company, and the re-election of Vice-President D. E. Kline and Treasurer C. M. Sears. Mr. Sears is starting on his fifth consecutive year as treasurer of the club.

Mr. Davis has named his committees as follows:

FINANCE—T. M. Brown, W. P. Brown & Sons Lumber Company, chairman; D. E. Kline, Louisville Veneer Mills, and C. M. Sears, Edw. L. Davis Lumber Company.

ADVERTISING—D. E. Kline, chairman; G. D. Crain, Jr., and T. M. Brown.

MEMBERSHIP—P. G. Booker, Booker-Cecil Company, chairman; R. F. Smith, Ohio River Saw Mill Company.

ENTERTAINMENT—Stuart R. Cecil, Booker-Cecil Company, chairman; G. D. Crain, Jr., and C. M. Sears.

CONSTITUTION AND BY LAWS—D. E. Kline, chairman; P. G. Booker and Smith Milton, Louisville Point Lumber Company.

TRANSPORTATION—A. E. Norman, Norman Lumber Company, chairman, and E. B. Norman, Norman Lumber Company.

LOGS—H. E. Kline, Louisville Veneer Mills, chairman, and Edward S. Shippen, Louisville Point Lumber Company.

After a two-day shutdown, due to the necessity of making some machinery repairs, the sawmill of the C. C. Mengel & Bro. Company has been put in operation again full time, this meaning day and night. The demand for mahogany lumber continues unabated, while the call for veneers also is picking up. The veneer mill, however, is running at a normal rate and putting in little overtime.

The New Albany Veneering Company is securing additional floor space by the erection of a large balcony in its gluing department, which will be devoted to handling Circassian walnut veneering. Business with the company has been so good as to justify enlargements in the plant.

The Robe Lake Lumber Company is now headed by W. P. Brown, Mr. Brown succeeding M. A. St. John as president. The other officers are: J. G. Brown, vice-president; T. M. Brown, treasurer, and Leroy Alcott, secretary. Headquarters of the company, which owns 12,300 acres of timberland in Arkansas, will be retained at Memphis.

Owing to the fine, dry weather which has marked this fall, mills in this territory are operating full time. Men and teams have been available during the past month in greater number, with the harvesting of the crops completed, and logs have been coming out in greater quantity than for several years.

The Jefferson Woodworking Company of Louisville has decided to go into the veneering business, and will make veneered table tops as soon as an addition now in course of construction is completed. The new department will start about Jan. 1. Table slides have been about the only product of the concern heretofore.

ST. LOUIS

The board of directors of the Lumbermen's Exchange held a special meeting on Nov. 12 to discuss what action, if any, it should take in regard to the general advance in hardwood rates to nineteen cents, from the greater part of Arkansas and Louisiana to St. Louis. The advance will amount to from two to three cents. It was decided that Thomas E. Powe and George McBlair, president and secretary respectively of the exchange, should attend a meeting called for the next afternoon at the traffic department of the Business Men's League. At this meeting it was decided to refer the matter to their respective organizations.

Another meeting was held on Nov. 18, at which the traffic officers of the St. Louis and southwestern lines and the hardwood representatives attended to confer further. The lumber representatives outlined that if the railroads were going to advance the rates generally, the railroads should now re-establish the old rate basis, which existed prior to January, 1911, between Cairo, Thebes and St. Louis; that the reason of the advance having been made at that time, so it was claimed by the railroads, was on account of the low rates on lumber, rendered that service unprofitable; that since the railroads were to get higher rates, they should be willing to give St. Louis its just dues. The railroad officials took the matter under advisement.

The C. F. Luehrmann Hardwood Lumber Company reports a good healthy demand for nearly every item on the hardwood list. This is especially true of red gum and ash. Other hardwoods, of which it has a good assortment on hand, are also being freely called for.

E. W. Blumer, sales manager of the Lothman Cypress Company, has recently returned from

a selling trip. As is usually the case, he brought a nice bunch of orders. He says the conditions in the East are most encouraging for future business and he believes the present good demand for cypress will continue for some time to come, provided the weather continues favorable for building.

The Linderman Machine Company of Muskegon, Mich., has opened an office at 1808 Lumbermen's building, St. Louis, Mo., with D. H. MacLean in charge.

NEW ORLEANS

Thirty thousand acres of cutover land in La Salle and Catahoula parishes are to be converted into a forest reserve for reforestation, under the direction of the Conservation Commission, thus inaugurating the first effort toward scientific forest cultivation attempted in Louisiana. Wardens are to be placed in charge of the land to watch the growth of the trees and to protect them against forest fires and against the ravages of stock. The area is in the center of a splendid hardwood and yellow pine belt. All available timber has already been cut from the land and new trees are to be grown and cared for.

The outcome of the experiment will be watched with much interest by lumbermen of the state, and from present indications the project is sure to lead to similar ones.

The regular monthly meeting and dinner of the Lumberman's Association of New Orleans was held Nov. 12. After the usual bountiful dinner, the meeting was called to order and business matters were taken up. Transportation questions were particularly discussed and it was decided that the transportation committee would take up the matter with several of the railroads.

As a result of the law passed by the recent state legislature taxing timber at its worth when cut from the soil, a suit has been filed by prominent lumbermen of the state as to the constitutionality of this act. The Conservation Commission is doing its best to enforce the law, while the big companies are trying to have the value per acre of the standing timber taxed. The matter is still pending, and from present indications the fight will be a long and hard one.

MILWAUKEE

The free employment offices in Milwaukee and other large cities of the state have found that the present demand for laborers, especially the common laborer, is far beyond the supply. During October more than 2,900 men and 670 women were referred to employers, of which 1,538 men and 331 women accepted the positions. Many offers were received from construction companies and the building trades who wish to finish as much work as possible before the frost. The woodworking and furniture plants were among the lead of those who demanded laborers.

George P. Noble, wholesale lumberman of this city, has filed a voluntary petition of bankruptcy before Referee Nye, giving his assets as \$46,919.57 and liabilities as \$40,315.36. Of his claims, \$25,113.05 are unsecured and \$14,436.46 are secured.

H. R. Stolle of Tripoli, a prominent lumberman of this state, has purchased a large part of the stock of the Badger Basket and Veneer Company of Burlington.

The White Star Lumber Company has become possessor of the sawmill formerly owned and operated by the Antigo Manufacturing Company of Antigo. The plant, which has been idle for the past two and one-half years, will require alterations and improvements.

The Mason-Donaldson Lumber Company of Rhinelander, recently disposed to Montgomery Ward & Co. of Chicago over ten thousand acres of heavily timbered land just north of the state line.

The J. S. Sterns Lumber Company of Odenah, which has been operating in the Bad River reservation, has purchased two tracts of timber, one on Lake Superior, one at the northern end of Bayfield county and another in the northwest corner of the upper peninsula of Michigan. The timber is being cut and towed to the mill at Washburn to be sawed.

The Oelhafen interests of Tomahawk were successful bidders at the sale of state timber, having secured a tract lying north of Tomahawk on the Tomahawk river. Three camps will be started on the tract, the estimates calling for over a million feet of timber.

Official announcement by William Templeton of Chicago, president of the Peshtigo Lumber Company, whose sawmill was recently destroyed by fire, confirms rumors that the plant will be

rebuilt as soon as possible. It will cost \$150,000.

The Smith Manufacturing Company of La Crosse, manufacturer of wagons and agricultural implements, has rented a piece of land and is building an additional building to its plant.

Isaac H. Crawford, for thirty-two years chief engineer at the Paine Lumber Company at Oshkosh, died at his home at 364 New York avenue recently, as the result of an internal cancer. Mr. Crawford was a native of Canada, having been born in 1847. He lived at Oshkosh for about forty years. A wife and three children survive him.

The sawmill of the Fred Schubring Lumber Company of Wausau has been started for its winter run, during which time the cut will exceed twelve million feet of hardwood and hemlock.



The Hardwood Market



CHICAGO

Local wholesalers, as for some time in the past, are concentrating their main energies on the buying end of the business, as it seems to be possible for almost anybody to effect sales at reasonably strong prices. The most efficient of the local trade are showing their ability in taking up stocks at figures which will net them good profit and in disposing of their lumber at a little higher basis than the majority of the trade.

It cannot be said that any items in the local hardwood business are weak, although red gum and wide poplar, as at other centers, are the slowest movers. Ash, basswood, oak, birch, maple and chestnut are the leaders in the local market, and there is very little difficulty encountered in marketing stock of good quality of these woods.

Owing to the difficulty in securing lumber from the usual sources of supply, there has been quite a little trading of late between the wholesalers themselves, and the good effects of association and club work are shown in the fact that the members of the local trade are willing to sell their fellow members at a price which will net both of them some profit rather than to do everything possible to freeze out each other, as was the custom under the old method of conducting the lumber business.

The local trade is considerably excited over the proposed increases in freight rates from the South to Ohio river crossings and western territory. The fear is expressed in some quarters that if these increased rates go into effect it will seriously endanger the local market for low-grade material, which holds an important place in Chicago lumber consumption. It is feared that an increase in rates such as is proposed would make the ultimate selling price of low-grade stock so nearly on a parallel with the cost of getting it into the local market that there would not be enough margin in the transactions to make them worth while.

NEW YORK

The hardwood market shows a continuance of the strength that has been noted for the past several months. Inquiries are brisk and prices remain firm with some advances noted. Local yards are by no means carrying a normal supply of material and new stocks are drawn from almost as fast as received. This, with the difficulties experienced by shippers getting cars and forwarding stock, practically assures a strong market for the entire winter season.

Oak, chestnut, birch and maple show advances

in the list, some items bringing two dollars more than a month ago. Cherry continues firm. The rest of this list shows no change in price. Hardwood flooring is in good demand and an advance in oak flooring is noted.

PHILADELPHIA

In spite of the more or less unavoidable concern in the November election, there has been no diminution of activity in the hardwood lumber business during the last fortnight. All standard grades, especially of dry lumber with a reasonable guarantee of delivery, find a ready market, and prices are well sustained. Although the fall rush in furniture buying is practically over, the factories have all they can do to catch up with orders. The other wholesale consuming industries continue active, in many instances being obliged to work overtime several nights in the week. This is a good word for the prosperity preachment which has begun. There is a little relief in the car shortage handicap in some of the lumber distributing fields, and a fair volume of stuff is being shipped, but orders are still delayed at many points. An encouraging sign of the times is the stout optimistic feeling which prevails everywhere as to outlook.

Oak, both red and white, still heads the list; stocks are scarce and prices are stiff. Quarter sawed oak is strengthening right along, and prices are moving up. Chestnut, plain and sound wormy, holds a good position, ash has many friends, poplar remains steady, the mahogany and veneer market continues active; birch and beech are selling freely and cypress is improving.

PITTSBURGH

No bad after-election effects are visible in the hardwood market here. The volume of inquiries keeps up surprisingly well, considering the fact that the inventory season is close at hand and that the usual first of the year statements will have to be made shortly. Purchasing agents as a rule are making ready to buy more lumber for 1913 than they did this year. Evidently they are determined not to be caught again with a shortage, and they also foresee that their respective plants are going to be crowded with orders if present business conditions continue. All kinds of fine hardwood for use in implement, furniture and automobile factories is in excellent demand. Prices are firm with small increases noted every few weeks. Stocks at the mills are very low, although all mills are working nearly or quite to capacity. The splendid undertone in the hardwood market is evidenced very plainly

BUFFALO

The hardwood trade is on a good scale of activity and the prospects are good. The local yards are carrying well-assorted stocks, some of them having supplies in excess of those of last year. The car shortage has not been very serious in this section, and there is no great complaint over the delays to shipments from the South. In the general list of hardwoods prices are holding very firm.

Good and common oak is short and bringing a very strong price. Quartered oak is in a little better demand than recently; the furniture factories employing it to a larger extent again. Poplar is inclined to be slow. Cherry has taken a little start, but has not become active. Chestnut and ash are in steady inquiry, while birch and maple are good sellers.

BOSTON

The market for hardwood lumber has been moderately active during the past two weeks, and prices are well held. Some dealers in this market state that quotations on some classes of hardwood lumber received by them within a few days are firmer and higher than any price previously received and they do not consider that top prices have yet been seen. Others believe that it will be very difficult to get further advances unless there is a decided improvement in the demand. Offerings of dry lumber are smaller than they have been for several months at least, and it really looks as if the manufacturer who has stock in good shipping condition can get practically his own price.

Shippers are still forced to contend with the car shortage, for which condition no immediate relief is expected. Those dealers who brought in lumber ahead of orders are having no real difficulty in making sales, as the average buyer has not greatly anticipated his wants.

Quartered and plain oak is very firm, an advance in price of two dollars being reported in some instances. Black walnut is in small offering with a fair demand reported. Maple flooring is fairly active. Prices are well held. White-wood is in fair call and prices are very well held.

BALTIMORE

Perhaps the only change in the hardwood situation to be reported during the last two weeks is a further advance of \$2 to \$3 in the price of oak, which, however, does not seem at all to have checked the movement. The demand keeps up undiminished, and there is every prospect at this time that the year will end with the requirements of the trade up to exceptional proportions. Mills report that they can get offers for all the lumber which they are able to turn out. Not even the merest tyro in the matter of selling can fail to dispose of stocks if he has them to deliver. This state of affairs extends to practically every division of the trade, with the sole exception of extra wide poplar, which fails to find favor among buyers at such prices as would be commensurate with the scarcity of the wood. The absence of a spirited or even moderately active demand for extra wide poplar is noted abroad as well as in the domestic trade, and has come to be accepted as a fact which cannot be altered. The ordinary widths are active enough, inquiries being numerous and the buyers showing a disposition to meet the prices asked by the producers.

The car shortage continues to interfere with a free movement of stocks, but less trouble is experienced on this account along the northern railroads than down South. As a rule, it is possible to meet at least the more urgent wants, and there is no such embargo upon the freight movement as would cause serious embarrassment. Of course, the possibility that a shipment may fail to reach its destination in a reasonable time stimulates the interest in supplies, and the yards as well as other buyers are placing orders with sufficient freedom to allow for delays. The quotations on oak are probably as high as they have been at any previous time, and the demands upon the mills are such as to keep all the plants busy. So brisk is the movement as to affect every kind of lumber in general use.

The interest on the other side of the Atlantic is attested by the arrival of a number of representatives of foreign firms in search of supplies. The ocean freight situation is becoming better. In addition to the Atlantic Transport Line most of the others have now announced their rates, but these mark such an advance over the current figures that exporters hesitate about binding themselves for the whole of 1913. Some of them prefer to take chances, making such shipments at the prevailing rates as they must and hoping that the companies will find it impossible to maintain the range put out. With the exception of the high ocean freight rates and the car shortage, the hardwood trade has nothing to complain of, being active in all of its branches and presenting a most favorable prospect.

COLUMBUS

Dealers throughout central Ohio report a good demand in all varieties of hardwoods and a continuation of the firmness in prices. Building operations continue active. Oak is especially strong and is advancing steadily. The demand seems to center principally in the quartered. Dry stocks are scarce, and hence all hardwoods are moving better. The car shortage still continues, but has improved somewhat over the past week. Buyers do not seem satisfied to buy in large quantities until the shortage is better. Red oak and plain oak are in good demand and prices are going up. Ash is advancing and is particularly strong, as is also basswood and chestnut.

CINCINNATI

There is a steady demand for all items on the hardwood list with plain oak a leader. Quartered oak is gradually getting into its former position, and dealers in this wood are much encouraged. Ash is very scarce and in big demand. All low grades are called for daily, and dealers are having trouble in finding sufficient quantities to supply the trade. Chestnut is doing very well, both upper and lower grades being called for and bringing top prices.

There is a strong tone to the poplar market again. Low grades are in strong demand at top prices and the good grades are picking up. Wide stock also has been doing much better.

All grades of cypress are going well; planing mills are using No. 1 shop and better in large quantities and the box factories are taking all the low-grade stock they can get hold of and paying good prices for it. Receipts are much better than for some time and prices are holding firm.

Hardwood flooring is moving fast at good prices.

All wood consuming factories in this section are very busy, especially the furniture trade. Box factories are having considerable trouble in procuring enough stock to keep them busy. The implement business is in good shape, and carriage woodwork plants are doing a capacity business. The automobile industry has been

exceptionally good all season, and there is every indication of a brisk winter in this line.

The late building season has kept the planing mills busier than ever before. Favorable weather conditions are responsible for continued activity among the building contractors. Many buildings are now under construction that were not expected to be started until next season, thus assuring more work for millwork men and interior finish people.

TOLEDO

Hardwoods continue in good demand with prices stiff and supplies short. The car shortage is seriously affecting deliveries from the South, in some instances mills being compelled to wait as long as thirty days for a car. The demand for lumber has kept up remarkably well, and it is generally noted here that there has never been a presidential election year when business has been affected so little by the political situation. It seems to be the general opinion among lumber dealers that there will not be much tariff tinkering, and moreover the tariff changes likely to be made will have the tendency to put more money in the pockets of lumber dealers, which no sane American business man is likely to meet with objections.

Red gum is in specially heavy demand, but is hard to get. First and seconds plain oak is scarce, and quartered oak is quoted at an increasing figure. Mahogany is strong in demand and high in price. Ash is in good demand. The local yards are running pretty low on stocks and there is bound to be heavy buying around the first of the year. The enormous demand which has been made for hardwoods of all kinds from the building trades is falling off a little, but the factory demand is strong.

INDIANAPOLIS

Although business is by no means rushing, the hardwood trade is fairly active. There has been no decreased activity in the last fortnight, however. Many retail dealers are making inquiries as to prices and prospects of delivery, and some few orders are coming in. Hardwood prices are steady.

Local hardwood wholesalers and manufacturers appear to be getting sufficient stock to meet their needs, but some trouble is experienced in getting it shipped out again. The coal fields are making considerable demand for cars at this time, and the Indiana corn crop will soon begin to move. The car shortage situation appears to be improving slightly, however, and it is thought that this condition will be cleared up within the next few weeks.

MEMPHIS

The car situation is considered much better in this territory than it was a short time ago, and lumber is being moved with rather greater dispatch. At some interior points there is still a scarcity of cars, and shipment of both lumber and logs is delayed on this account. However, it is conceded by practically all interests in the trade that the railroads are giving a more satisfactory service and that lumber is moving with greater regularity than a short time ago. Owing to the fact that the height of the cotton movement has already passed, it is anticipated that there will be further improvement in the movement of traffic in the near future.

Weather conditions throughout this section recently have been very favorable for work in the woods, and this has made excellent progress. The amount of timber being brought out is quite large and the outlook is for an adequate supply of logs for the winter. Some of the firms in this territory have quit logging operations and will do nothing else in that line this season. There are others, however, and the latter are in

the majority, who are still getting out timber and who will continue this work as long as it is possible to make satisfactory progress therewith.

Practically every hardwood mill in the Memphis territory is running on full time, and yet there is no particular accumulation of lumber, particularly in shipping dry stock. The volume of business during the past few months has been quite satisfactory, and while production has materially increased, there has been likewise a substantial gain in shipments. There is no accumulation of lumber in any direction, and, on the other hand, there are some items which are particularly scarce.

One of the features of the box situation here is the fact that there is a decided increase in the amount of gum lumber being used in the manufacture of standard packages. A prominent manufacturer here said recently that he was using about sixty per cent gum, as against forty per cent cottonwood. A year or two ago the figures were easily reversed. There is no doubt that the scarcity of cottonwood and the high prices therefor have had some influence toward increasing the use of gum. The growing popularity of this wood, however, has been an important factor in this substitution. It is noteworthy, however, that there is little or no gum being used in the manufacture of cases used for the storage of eggs.

LOUISVILLE

The demand for hardwoods continues brisk and satisfactory, both as to extent and prices offered. Quotations are strengthening in practically every line, and the man with a wide range of stocks is hard put to it to tell which items should be included among his "six best sellers." The prospect of tariff revision is apparently not affecting the optimistic feeling existing among consumers of hardwoods, and the election of Mr. Wilson has not been regarded as anything to worry about. Manufacturing interests in all directions are continuing to expand, instead of drawing in, and even the peeved individuals who canceled orders "because of the election" were so few in number, as a matter of fact, as to be possessed of a splendid isolation. Nobody with any business sense is insisting on cutting down the volume of his business just because the man he didn't vote for got elected. As long as the present sound foundation for bigger trade exists, there is no reason to fear any retarding of the process of developing trade to a normal state as to quantity and profits. Oak continues to lead in sales in this market, plain oak being sold as fast as offered, and quartered oak being in good demand. Quartered red is going up, buyers realizing that the difference between the price of that commodity and quartered white is greater than is justified by a comparison of the intrinsic values of the woods. Good poplar, which has been rather slow, is improving materially, the lower grades continuing to sell in large quantity. Ash is a good mover, as are gum and cottonwood.

ST. LOUIS

A reasonable volume of business is reported by the various local hardwood dealers generally. Were it not for the fact that their stocks have been depleted by the calls that have been made on them during the past few weeks, the hardwood dealers could do considerably more business. The demand has been most unquenchably divided. The larger yards have had an excellent trade and are well pleased with what they have done, but the smaller yards are not as satisfied with their business. Prices generally are held firm, but many items, such as plain oak and ash, command a better price when they can be obtained.

The weather has been most favorable for get-

ring out timber, and that has been taken advantage of by many of the mills. A good business has been done by the cypress people, specially in mixed car lots, and from indications there will be a good trade for several weeks to come, unless the weather should suddenly turn very cold. The factory demand is fair and the call from the yards is satisfactory. Requests from the northern territory are coming in nicely. Cypress receipts are somewhat better than they were and more cypress is coming into the local market than at any time during the cut shortage. Sash and door people are well satisfied with the business they are doing. The call from the country yards has been better recently and special work keeps up well.

NEW ORLEANS

Although trade is not what can be called brisk, the local hardwood market is holding its own. Nearly every variety of oak is in strong demand, with prices very firm. The lower grades of gum are scarce and command high prices. Buying is firm and the tendency to fill orders as they are booked holds sway. This keeps the mill stock light.

Notwithstanding the many obstacles in the transportation of the export trade, a fairly heavy

business is being done, the limit of the price practically fixed by the possibilities of getting goods forward. While buying is made at a fairly heavy purchasers abroad it still holding prices as high as possible, there is a volume of comparatively small orders which in the aggregate keep up the total to about normal conditions.

The restrictions placed by the railroads on the movement of forest products are beginning to show their effect in the decreased movement to the port, and to some extent make the lack of ocean tonnage less noticeable. The situation thus slimmers down to the freight conditions, and the hardwood exports are governed to a marked degree by the freight question. Oak seems to be in good demand for export, and in some cases fancy prices are offered.

From all sections, however, come dissatisfied reports relative to the ocean freight rates and the reluctance of the railroads to bring into New Orleans more lumber than can be handled by the steamship lines. The outlook for better rate conditions is by no means encouraging, and what change is noticed is almost uniformly in the way of further increases.

NASHVILLE

The tone of the Nashville hardwood market continues strong, with active demand and considerable inroads being made into dry stocks by the drain that has been steady for several months. Plain and quartered oak continues to be in the greatest demand. There is a satisfactory demand for chestnut and poplar. Ash and hickory are good sellers, with very light supplies available. One local plant turned down an order for 500,000 feet of plain oak and other smaller orders because of inability to fill the orders.

MILWAUKEE

While there is a slight falling off in demand from the building trade, owing to the lateness of the season, orders from various sources for hardwood are coming in faster than they can be filled. Local wholesalers report the receipt of an unusually large number of inquiries and orders for this season of the year, but they say they are handicapped in the delivery of stocks. There seems to be a general shortage here and at the mills about the state. Demand from the sash and door plants, the furniture factories and the farm implement concerns is decidedly better than at this time a year ago.

Reports from the northern lumber country indicate that prices at the mills are strong and give promise of further advance as the shortage of lumber becomes more serious. First and second birch is selling well, interior finish and sash and door concerns buying considerably in this line. There is a brisk movement in hard maple and wholesalers say that there is a shortage in Michigan stocks. Many dealers are looking to Wisconsin mills for their supplies this season. Basswood stocks at the mills seem to be well cleared up, stocks of No. 1 and No. 2 common being especially light. Both red and white plain oak is firm, while quartered white oak is stronger than it has been recently.

LIVERPOOL

The market position here is the most extraordinary that has ever been known, even by the oldest men in the trade. Prices have gone up to an incredible extent. This does not mean that returns are higher to the shipper, but sea freights have gone up to such an extent that prices have been compelled to go up to correspond. The general opinion here is that present values of freight will last until March, when a very large number of ships, now in the hands of the shipbuilders, will be launched ready for sea.

Hickory logs have actually been sold at first hand at 28 9d per cubic foot Liverpool string measure for future arrivals. It is, however, quite impossible to buy any further stocks on the same basis. Shippers are asking 3s, but no sales on this basis have been reported.

Rod ash is equally firm and 2s 6d has been mentioned as the value of first growth ash to arrive. The mahogany position is exactly in the same position, and judging from recent sales this market must continue very firm. Here again the freight rates are the main cause of high prices and March may see a change, though there is a very keen demand for hickory at present. Canary whitewood is selling very well and good prices have been realized for stocks on hand. The wider stocks especially are firm, though the very high prices make the wood prohibitive for many users. Black walnut is practically non-existent and prices keep very firm. Cheaper stocks are coming into favor. Tupelo in 5x8 inch and 10x14 inch is in favor. Birch is moving quietly and firmly, while all the oak is sold at good prices as it arrives. Oak dimension orders are moving quietly and prices are keeping very firm for future deliveries. Gum stocks of all kinds have been selling quite well, as these are being used extensively as a substitute for poplar.

GLASGOW

The tone of the timber trade in this section is steady, with a continued movement into consumption both from the quay and from the various storage yards. Brokers are holding goods firmly on the quay and if buyers cannot be found at their prices the goods are promptly stored, brokers knowing well that advanced prices can be obtained simply by holding for a short time. The high f. o. b. prices of lumber, coupled with the abnormal rates of freight, makes the consumption somewhat crippled. As numerous freight contracts expire at the end of the year, the f. o. b. costs are bound to increase still further.

Imports meantime being unusually light cause inroads to be made upon stocks in first hands. Oak planks and boards and the various furniture woods which arrived by the last two Baltimore and Newport News steamers were well cleared direct from the quay, as was also the poplar. The prices were well up to the standard, although some of the gradings were not what should have been. Sap gum (hazel pine) and black walnut are in moderate request, but in some instances the prices do not justify consignment. Spruce in first hands is well nigh depleted and fresh imports are very improbable at present rates of freight. Canadian pine deals have arrived moderately within the last week or two and keen competition is taking place for the various widths. Baltic spruce has fallen off slightly, the freight rate no doubt accounting for this, but the small lots imported have been cleared on arrival. The demand for shipbuilding requirements continues unabated, and several new contracts have been placed during the past week.

Freights all over have now reached high level; in fact well nigh prohibitive for most parties, unless much higher prices can be established. The annual freight contracts being made at present are abnormally high. The uncertainty of the steamship lines taking lumber when they can get cotton is increased by the shortage of cars for the inland movement on the other side, and by restrictions on through bills of lading as well as consignments by rail for certain lines of steamers.

With prices advancing, buyers are showing a tendency to increase their holdings, a course which will prove advantageous to themselves.

The various markets in the west of Scotland are in a healthy condition, and a good winter trade is sure to be experienced.

White Oak Flitches

Will pay cash f. o. b. your station for Quartered White Oak Flitches

CORRESPONDENCE SOLICITED

PUTNAM VENEER & LUMBER CO.
ROACHDALE, INDIANA.

LUMBER WANTED

4/4 & 5/4 No. 3 and 4 Com. Poplar.
4/4 No. 3 Basswood.
4/4 No. 3 Chestnut.

P. T. Baker & Son
1212 W. Liberty St. Cincinnati, O.

THREE STATES LUMBER CO.

Manufacturers of

SOUTHERN HARDWOODS
Cottonwood and Red Gum
SPECIALTIES

Main Office, Memphis, Tenn.

BLUESTONE LAND & LUMBER COMPANY

MANUFACTURERS

West Virginia Hardwoods

SOFT WHITE PINE
OAK POPLAR
CHESTNUT HEMLOCK

BAND SAWED STOCK

Complete Planing Mill Facilities

RIDGWAY, PENNSYLVANIA

W H Y ?

WHY DO more than 320 of the most prominent and successful lumber manufacturers exchange nearly \$26,000,000 of indemnity against fire loss at

Manufacturing Lumbermen's Underwriters

B E C A U S E !

BECAUSE it is the oldest and strongest inter-insurance association among lumbermen, being now in its fourteenth year.

BECAUSE \$728,910.41 cash savings have been returned to members.

BECAUSE \$756,787.21 cash surplus, owned entirely by the members, has been accumulated.

BECAUSE \$2,012,427.96 has been paid in losses under prompt and equitable adjustments without resort to quibbling or technical controversy.

BECAUSE it was the first to settle lumber losses on a market value basis.

BECAUSE the regular, frequent and thorough inspections given the plants of all members help them to prevent fires, thus materially reducing both the fire waste and the cost of indemnity.

FOR FULL PARTICULARS ADDRESS

Western Representative
HARRY B. CLARK,
Portland, Ore.

Harry Rankin & Co.

Attorney in Fact,
KANSAS CITY, MO.

Advertisers' Directory

NORTHERN HARDWOODS.

American Lumber & Mfg. Co.....	17
Beecher & Barr.....	16
Bradley, E. C., Lumber Co.....	15
Brown Brothers Lumber Company..	66
Buffalo Hardwood Lumber Co.....	67
Coale, Thos. E., Lumber Company..	16
Cobbs & Mitchell, Inc.....	3
Craig, W. P., Lumber Co.....	17
Curl, Daniel B.....	16
Darling, Chas. & Co.....	57
Elias G. & Bro.....	67
Estabrook-Skeele Lumber Co.....	4
Flanner-Steger Land & Lumber Co.	64
Forman Company, Thomas.....	
Goodyear, C. A., Lumber Co.....	66
Hadentine Lumber Company, Inc....	1
Hanson-Turner Company.....	62
Heyser, W. E., Lumber Co.....	14
Holyoke, Chas.....	17
Holloway Hardwood Lumber Co.....	
Jones Hardwood Company.....	16
Kent, J. S., Company.....	17
Klann, E. H.....	57
Kneeland-Bigelow Company, The...	3
Litchfield, William E.....	16
Long-Knight Lumber Company	
MacLaren, D. B., Lumber Company..	15
McIlvain, J. Gibson, & Co.....	2
McLean, Hugh, Lumber Co.....	67
McParland Hardwood Lumber Co....	57
Miller, Anthony.....	67
Mitchell Bros. Company.....	3
Mowbray & Robinson.....	14
Oelhafen Lumber Company.....	66
Osgood & Richardson.....	57
Palmer & Parker Co.....	17
Parry, Chas. K. & Co.....	16
Perrine-Armstrong Company.....	15
Salling-Hanson Company.....	64
Sawyer-Goodman Company.....	66
Schultz, Holloway Co.....	4
Smith, Fred D.....	57
Standard Hardwood Lumber Co.....	67
Stewart, I. N., & Brother.....	67
Stimson, J. V., & Co.....	15
Sullivan, T. & Co.....	67
Tegge Lumber Co.....	
Vinke, J. & J.....	64
VonPlaten Lumber Co.....	64
Webster Lumber Co., George.....	17
White, Wm. H. Co.....	68
Wiggin, H. D.....	17
Williams, Ichabod T., & Sons.....	1
Willson Bros. Lumber Company.....	16
Wisconsin Land & Lumber Co.....	64
Wistar, Underhill & Nixon.....	16
Wood-Mosaic Company.....	17
Yeager, Orson E.....	67
Young, W. D. & Co.....	3

SOUTHERN HARDWOODS.

American Lumber & Mfg. Co.....	17
Anderson-Tully Company.....	9
Atlantic Lumber Company.....	1
Baker-Matthews Mfg. Co.....	65
Baker, P. T. & Son.....	53
Bennett & Witte.....	15
Bluestone Land & Lumber Co.....	53
Boice Lumber Company.....	10
Booker-Cecil Company.....	11
Bradley, E. C., Lumber Co.....	15
Brown, W. P., & Sons Lumber Co....	11
Buffalo Hardwood Lumber Co.....	67
Carrier Lumber & Mfg. Co.....	18
Cherokee Lumber Co.....	7
Coale, Thos. E., Lumber Company..	16
Curl, Daniel B.....	16
Darling, Chas. E. & Co.....	57
Davis, Edward L., Lumber Company	11
Dempsey, W. W.....	65
Duhlmeier Brothers.....	15
Elias G. & Bro.....	67
Estabrook-Skeele Lumber Co.....	4
Farrin, M. B., Lumber Company.....	15
Faust Bros. Lumber Co.....	18
Flanner-Steger Land & Lumber Co.	
Garetson-Greaseon Lumber Co	65
Hadentine Lumber Company, Inc....	1
Hamilton, J. V.....	12
Heyser, W. E., Lumber Company..	14
Hill Brothers Tie & Lumber Co.....	10
Himmelberger-Harrison Lumber Co.	65
Hitt, H. H., Lumber Company.....	65
Holloway Hardwood Lumber Co.....	65
Huddleston-Marsh Lumber Co.....	
Kent, J. S., Company.....	17
Kentucky Lumber Co.....	14
Keys-Walker Lumber Co.....	1
Kimball & Kopcke.....	6
Klann, E. H.....	57
Lamb-Fish Lumber Co.....	8
Litchfield, William E.....	16
Little River Lumber Company.....	18
Logan-Maphet Lumber Co.....	6
Long-Knight Lumber Company.....	
Louisiana Long Leaf Lumber Co....	65
Louisville Point Lumber Company..	11
Love, Boyd & Co.....	7
Maley, Thompson & Moffett Co.....	13
Maphet & Shea Lumber Company...	6
McIlvain, J. Gibson, & Co.....	2
McLean, Hugh, Lumber Co.....	67
McParland Hardwood Lumber Co....	57
Miller, Anthony.....	67
Mowbray & Robinson.....	14
Norman Lumber Company.....	11
Ohio River Saw Mill Company.....	11
Osgood & Richardson.....	57
Paepoke-Leicht Lumber Company..	16
Parry, Chas. K. & Co.....	10
Peytona Lumber Company, Inc.....	10
Radina, L. W., & Co.....	14
Ransom, J. B., & Co.....	7
Ritter, W. M., Lumber Company.....	68
Russe & Burgess, Inc.....	18
Salt Lick Lumber Company.....	65
Schultz, Holloway Co.....	4
Schuyler, S. E. & Co.....	1

Smith, Fred D.....	57
Standard Hardwood Lumber Co.....	67
Stewart, I. N., & Brother.....	67
Stimson, J. V., & Co.....	15
Sullivan, T. & Co.....	67

Tennessee Hardwood Lumber Co....	7
Three States Lumber Company.....	53

Vestal Lumber & Manufacturing Co.	6
Vinke, J. & J.....	64
Von Platen Lumber Co.....	64

Webster Lumber Co., George.....	17
West Virginia Timber Company.....	10
Whitmer, Wm. & Sons.....	16
Wiggin, H. D.....	17
Williams, Ichabod T., & Sons.....	1
Willson Bros. Lumber Company.....	16
Wistar, Underhill & Nixon.....	16
Wood-Mosaic Company.....	17
Wood, R. E., Lumber Company.....	17

Yeager, Orson E.....	67
----------------------	----

POPLAR.

Anderson-Tully Company.....	9
Atlantic Lumber Company.....	1
Baker, P. T. & Son.....	53
Farrin, M. B., Lumber Company.....	15
Faust Bros. Lumber Company.....	18
Hadentine Lumber Company, Inc....	1
Kentucky Lumber Company.....	14
Keys-Walker Lumber Company.....	1
Logan-Maphet Lumber Co.....	6
Maphet & Shea Lumber Company...	6
Peytona Lumber Company, Inc.....	10
Radina, L. W., & Co.....	14
Ritter, W. M., Lumber Company.....	68
Vansant, Kitchen & Co.....	68
West Virginia Timber Company.....	17
Wood, R. E., Lumber Company.....	17
Yellow Poplar Lumber Company.....	68

VENEERS AND PANELS.

Acme Veneer & Lumber Company...	13
Adams & Raymond Veneer Co.....	12
Ahnapee Veneer & Seating Co.....	62
Astoria Veneer Mills & Dock Co....	63
Bacon, R. S., Veneer Company.....	63
Cadillac Veneer Company.....	16
Central Veneer Company.....	61
Gorham Brothers Company.....	62
Hanson-Turner Company.....	61
Hoffman Bros. Company.....	61
Huddleston-Marsh Lumber Co.....	11
Jarrell, B. C. & Co.....	61
Kentucky Veneer Works.....	61
Kiel Wooden Ware Company.....	62
Knoxville Veneer Company.....	6
Louisville Veneer Mills.....	11
Maley, Thompson & Moffett Co.....	13
Mengel, C. C. & Bro. Company.....	11
Ohio Veneer Company.....	13
Penrod Walnut & Veneer Co.....	61
Putnam Veneer and Lumber Co.....	53
Rayner, J.....	4
Radford-Fortmouth Veneer Co.....	61
Sheppard Veneer Company.....	61
Southern Veneer Manufacturing	63
Company.....	
Underwood Veneer Company.....	63
Under Manufacturers' Company...	
Walker Veneer & Panel Co.....	57
Willey, C. L.....	1
Williams, Ichabod T., & Sons.....	1
Wisconsin Seating Company.....	62
Wood-Mosaic Company.....	17

MAHOGANY, WALNUT, ETC.

Acme Veneer & Lumber Company...	13
Astoria Veneer Mills & Dock Co....	63
Duhlmeier Brothers.....	5
Hamilton, J. V.....	12
Huddleston-Marsh Lumber Co.....	11
Maley, Thompson & Moffett Co.....	13
Mengel, C. C. & Bro. Company.....	11
Palmer & Parker Co.....	17

Penrod Walnut & Veneer Co.....	61
Purcell, Frank.....	65
Rayner, J.....	4
Willey, C. L.....	1
Williams, Ichabod T., & Sons.....	1

HARDWOOD FLOORING.

Beecher & Barr.....	16
Carrier Lumber & Mfg. Co.....	18
Cobbs & Mitchell, Inc.....	3
Eastman, S. L., Flooring Co.....	64
Farrin, M. B. Lumber Company.....	15
Forman, Thos., Company.....	64
Kerry & Hanson Flooring Co.....	64
Louisiana Long Leaf Lumber Co....	65
Mitchell Bros. Company.....	3
Robbins Lumber Co.....	
Salt Lick Lumber Company.....	65
Stearns Salt & Lumber Company...	8
Stephenson, I., Company, The.....	64
Webster Lumber Co., George.....	17
White, Wm. H. Co.....	68
Wilce, T., Company, The.....	4
Wisconsin Land & Lumber Co.....	64
Young, W. D., & Co.....	3

WOODWORKING MACHINERY.

Cadillac Machine Co.....	60
Defiance Machine Works, The.....	12
Linderman Machine Co., The.....	
Mershon, W. B., & Co.....	60
Phoenix Manufacturing Co.....	60
Saranac Machine Company.....	59
Smith, H. B., Machine Co.....	
Steinmetz, C. M.....	16
Westinghouse Electric & Mfg. Co ..	

LOGGING MACHINERY.

Baldwin Locomotive Wks.....	
Clyde Iron Works.....	60
Lidgerwood Mfg. Co.....	16
Russel Wheel & Foundry Co.....	

DRY KILNS AND BLOWERS.

Grand Rapids Veneer Works.....	59
Phila. Textile Mch. Co.....	1

SAWS, KNIVES AND SUPPLIES.

Atkins, E. C., & Co.....	
Simonds Mfg. Co.....	

LUMBER INSURANCE.

Central Manufacturers' Mut. Ins. Co.	
Epperson, U. S.....	
Indiana Lumbermen's Mut. Ins. Co..	
Lumber Mutual Fire Insurance Co..	
Lumbermen's Mutual Ins. Co.....	
Lumbermen's Underwriting Alliance	
61 Lumber Underwriters.....	18
Pennsylvania Lumbermen's Mutual	
Fire Ins. Co.....	
Rankin, Harry & Co	54

TIMBER LANDS.

Lacey, James D., & Co.....	2
Spry, John C.....	4

MISCELLANEOUS.

American Freight Audit & Storage	18
Company.....	
Astoria Veneer Mills & Dock Co....	
Childs, S. D. & Co.....	57
Durant-Port Carriage Company.....	57
Gerlach, The Peter, Company.....	4
Lumbermen's Credit Association...	59
Mechanical Rubber Company.....	57
Tammis Silica Company.....	9
Wausau Advancement Association..	
Westinghouse Electric & Mfg. Co...	

CLASSIFIED ADVERTISEMENTS

Advertisements will be inserted in this section at the following rates:

For one insertion.....20c a line
For two insertions.....35c a line
For three insertions.....50c a line
For four insertions.....60c a line

Eight words of ordinary length make one line. Heading counts as two lines. No display except the headings can be admitted.

Remittances to accompany the order. No extra charges for copies of paper containing the advertisement.

EMPLOYEES WANTED

WANTED

Salesmen on our New Census publications. Splendid opportunity. Men making \$50 to \$75 per week. RAND, McNALLY & CO., Dept. B., Chicago, Ill.

WANTED

Thoroughly competent veneer slicer operator. In replying give age, qualifications, experience, size plants have operated, and complete references. Address

"BOX 111," care HARDWOOD RECORD.

IF YOU WANT

competent employees in any department of the hardwood business, there is no better way of securing them than by employing the Classified Advertisements section of HARDWOOD RECORD, which reaches woodsmen, sawmill men and salesmen in all parts of the country.

EMPLOYMENT WANTED

WANTED—EMPLOYMENT

When you want a salesman for New York state territory, write us. We can supply you with a good man. EMPIRE STATE ASSOCIATION of Wholesale Lumber & Sash & Door Salesmen. Chas. Johnson, Sec'y, 96 Kirkland Rd., Rochester, N. Y.

BY HARDWOOD LUMBER SALES MANAGER

who is thoroughly familiar with producing and consuming trade. Can deliver the goods. Address "BOX 118," care HARDWOOD RECORD.

TIMBER ESTIMATING

TIMBER ESTIMATES

Estimating Southern timber a specialty. Maps, detailed reports as to stand, quality and logging conditions. Have a few high-class properties for sale. Can furnish best references.

THOS. J. McDONALD,
East Tenn. Natl. Bank Bldg.,
Knoxville, Tenn.

WAGON STOCK WANTED

WANTED—WAGON STOCK

Wagon tongues, reaches, bolsters, hickory dimension stock for buggy and wagon work. Inspection at mill points.

J. A. BROWNE & CO., INC.,
North Manchester, Ind.

I AM IN THE MARKET FOR

75 to 100 cars of oak poles, bolsters, sand boards, eveners, and reaches; and hickory and maple axles. Will inspect at shipping point, and pay cash. E. B. BROWN, 372 Bayne St., Buffalo, N. Y.

LOGS WANTED

WANTED—BLACK WALNUT LOGS

We want hewed black walnut logs for export, 16 inches and upward in diameter. Terms cash. JOHN L. ALCOCK & CO., P. O. Box 994, Baltimore, Md.

WANTED—BLACK WALNUT LOGS

500 cars good black walnut logs, 10" and up in diameter, 6 ft. and up long. Will inspect at shipping point and pay cash. GEO. W. HARTZELL, Dayton, Ohio.

WANTED—HARDWOOD LOGS

200,000 ft. 28" and up White Oak logs.
200,000 ft. 12" and up Walnut logs.
50,000 ft. 12" and up Cherry logs.
C. L. WILLEY, 2558 S. Robey St., Chicago.

TIMBER LANDS FOR SALE

VIRGIN TIMBER

2,500 acres timbered land with Red and White Oak, Hickory, Pecan, Cypress and Gum; estimated to cut 7,000 feet per acre, 3 1/2 miles rail road, on river; land recently drained by dredge ditches. Price per acre, \$25.00; land without timber worth the price. Address owner.

E. J. SMITH, Paragould, Ark.

ARE YOU INTERESTED IN GUM and Red Oak?

I own in fee simple two small and carefully selected tracks of high-class gum and red oak stumpage. Will sell at price to make the buyer good money either as an investment or as an operating proposition.

Will deal with principals only. Address in confidence, "BOX 22," care HARDWOOD RECORD.

FOR SALE—2,400 ACRES

in West Carroll Parish, Louisiana—cruises 5,000 ft. Oak, largely White, per acre. In addition, has Gum and other Hardwoods, easily logged to nearby railroad station. Fine proposition. Additional timber can be procured. Address

H. H. HITT LUMBER CO., Decatur, Ala.

FOR SALE

15,000 acres virgin short leaf yellow pine, Louisiana, one body on railroad; will cut eighty million feet, and sixty million feet hardwood, one of the best tracts in State; price \$16.50 per acre; also 19,000-acre hardwood tract, price \$14.00 per acre. KENDALL & WILSON,

Palestine, Texas.

TIMBER FOR SALE

FOR SALE—HARDWOOD TIMBER

6,118 acres in fee simple of virgin timber land having on it the following: Oak, 15 million feet; cypress, 12 million feet; gum, 12 million feet; pine, 10 million feet. This is located in North Louisiana and is fine timber. Address

"OWNER," care HARDWOOD RECORD.

LUMBER FOR SALE

FOR SALE

Cottonwood which will be cut during the next sixty days. About 200,000 feet of wagon boards, any widths or lengths, absolutely clear, high grade. Also about 200,000 feet of No. 1 common and better. Please let us have your best cash offer. T. O. B. Omaha. Address

"BOX 117," care HARDWOOD RECORD.

FOR SALE

Common White Mahogany and common Peruvian Mahogany, which we would like to move.

GIECKMANN HARDWOOD CO.,
San Francisco, Cal.

LUMBER FOR SALE.

4 cars 4/4, 1sts and 2nds bone dry Sycamore, standard widths and lengths.
2 cars 4/4x13" and up dry plain 1sts and 2nds Red Oak, 50% 14 and 16 feet.
5 cars 4/4 No. 1 Com. Red Gum, bone dry.
W. D. REEVES LBR. CO., Helena, Ark.

OAK, POPLAR, ASH

and all other hardwoods, in all grades and thicknesses, can be readily sold if advertised in the Wanted and For Sale section of HARDWOOD RECORD. If you have a large stock you want to sell try a few lines in this department and see what a lot of inquiries they will bring you.

DIMENSION STOCK WANTED

WANTED

Five or ten carloads 2 1/2"x2 1/2"x30" White Oak Squares for delivery beginning at once. Address "BOX 117," care HARDWOOD RECORD.

WANTED—DIMENSION STOCK

Oak, plain and quartered; boards and squares Also dogwood and persimmon.

INDIANA QUARTERED OAK CO.,
7 East 42d St., New York, N. Y.

GLUED-UP POPLAR OR BASSWOOD

Dimension Stock to finish 7/8"x19"x36" in carload lots. Will furnish specifications upon request. ARTHUR BAILEY & CO., No. 1 Madison Ave., New York, N. Y.

WANTED—SMALL DIMENSIONS

We are always in the market for short dimensions in Oak Squares; also 3/4, 4/4, 5/4 and 6/4 Quartered White Oak 16 to 24" long; also Plain Oak 1x2 and wider, 12 to 54" long. We also handle the standard length hardwoods. What have you to offer for cash? Best of bank reference.

FURNITURE & CHAIR STOCK Co.,
5150 Chestnut St., Philadelphia, Pa.

LUMBER WANTED

WANTED

500,000 feet 1" clear plain White and Red Oak strips. WOOD-MOSAIC CO., New Albany, Ind.

WANTED

Five cars 1" No. 3 common chestnut.
DUHLMEIER BROTHERS, Cincinnati, O.

BUYERS OF HARDWOODS.

Do you want to get in touch with the best buyers of hardwood lumber? We have a list, showing the annual requirements in lumber, dimension stock and veneers and panels of consumers of those materials throughout the United States and Canada. The service is free to advertisers in the Record. It will interest you. Write us for further information about our "Selling Lumber by Mail System."

HARDWOOD RECORD, Ellsworth Bldg.,
Chicago.

BUSINESS OPPORTUNITIES**FOR SALE**

75% capital stock (\$10,000) hub manufacturing concern, doing \$35,000 business. Located in north Alabama. Will pay 40% cash dividend this year and have twenty years' more of timber. Orders booked for six months' run. Address
BOX 596, Sheffield, Ala.

FOR SALE

One band mill, and about one hundred million feet of hardwood stumpage. Very easy terms. Address owner, P. O. BOX "K," Pensacola, Fla.

EXCELLENT OPPORTUNITY

for man to go in manufacturing business. Have well-equipped hardwood factory suitable for making spokes and vehicle stock. Healthy location in town six thousand, on two rivers and two railroads. Address

"BOX 72," care HARDWOOD RECORD.

WOOD ALCOHOL PLANT

We have a very desirable location and ample supply of raw material for a wood alcohol plant. Will be glad to negotiate with anyone interested in the establishment of such an industry.

GEO. WEBSTER LBR. CO.,
21 Besse Place, Springfield, Mass.

VENEER PLANT FOR SALE

To close out our Veneer Plant at this place we are offering the entire plant, having a daily cutting capacity of 20,000 feet of logs into Basket and Crate stock.

Machinery lists on application, consisting of lathes, jointers, planers, re-saws, hamper, crate, butter-dish machinery and patents.

BRIDGEPORT WOODENWARE MFG. CO.,
Bridgeport, Ala.

MACHINERY FOR SALE**FOR SALE AT A BARGAIN**

One Coe 76"x32" Veneer Lathe.
One Coe 76" Veneer Clipper.
One 76" S. C. Rogers Buffalo Knife Grinder.

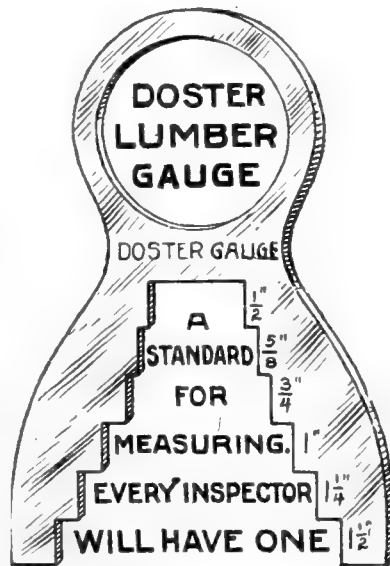
All machinery guaranteed to do first-class work, and good reasons for wanting to sell. Address "BOX 116," care HARDWOOD RECORD.

MISCELLANEOUS**WANTED—HARDWOOD LUMBERMEN—**

to try the Gibson Tally Book. The three-throw aluminum tally ticket cover accommodates any form of ticket desired. The use of the special triplicate tally ticket supplied, printed on waterproof paper with carbon backs makes tallies unalterable. For durability, convenience, accuracy and for systematizing the inspection of lumber the Gibson tally method can't be beat.

Special forms of tally tickets mailed on application. Covers sold on approval to responsible concerns.

HARDWOOD RECORD,
537 So. Dearborn St., Chicago.



For sale by HARDWOOD RECORD,
537 S. Dearborn St., Chicago, Ill.
50 CENTS EACH.

Gerlach Modern Machines
Produce the Cheapest and Best
COOPERAGE STOCK
and **BOX SHOOKS**
Circular, Band and Cylinder Saws
SAW AND LOG TOOLS
THE PETER GERLACH CO., Cleveland, 6th City, U.S.A.

CHICAGO**FRED D. SMITH****HARDWOOD LUMBER**

1337-1343 North Branch St. CHICAGO

E. H. KLANN

Cottonwood, Gum, Oak, Ash, Cypress, Yellow Pine, Dimension Stock

819 FISHER BLDG.

HAR. 1187

Osgood & Richardson

935 Peoples Gas Bldg.

**NORTHERN AND SOUTHERN
HARDWOODS**

Chicago Agents: LAMB-FISH LUMBER CO.

Telephone Canal 1688

CHAS. DARLING & CO.**HARDWOOD LUMBER**

22nd Street and Center Avenue
CHICAGO

**McParland Hardwood
Lumber Co. 2204 S. Laflin St.
HARDWOODS**

A Veneer Gauge is the answer to a Veneer User's craving for years. This "Walker Brand" Veneer Gauge is a steel gauge that will satisfy your wants for all time. You can't do yourself a better turn than to buy one of these gauges. It gauges ACCURATELY every thickness from 1/40 inch to 1/2 inch INCLUSIVE. Wake up to this opportunity. Price only \$1.98 delivered by U. S. Mail. Order now, today. Address—8456 Woodlawn Ave. Phone Hyde Park 25.
BIRDSEYE
Dept. C CHICAGO

99% PURE
SILICA
OR SILEX FOR WOOD FILLERS
TAMMS SILICA CO., 19 So. 5th Ave., Chicago

COUNTERFEIT CHECKS

are frequent except where our

Two Piece Geometrical Barter Coin is in use, then imitation isn't possible. Sample if you ask for it.

S. D. CHILDS & CO.
Chicago

We also make Time Checks, Stencils and Log Hammers.



This is Form Y

Y G. M. CO., PAT. JAN. 3, 1901

Elkmont Contracting & Supply Co.

Elkmont, Tenn.

Camp _____

191

DIA.	8	10	12	14	16		DIA.	8	10	12	14	16		TOTAL
8							37							
9							38							
10							39							
11							40							
12							41							
13							42							
14							43							
15							44							
16							45							
17							46							
18							47							
19							48							
20							49							
21							50							
22							51							
23							52							
24							53							
25							54							
26							55							
27							56							
28														
29														
30														
31														
32														
33														
34														
35														
36														
Total														
TOTAL NO. LOGS & AM'T. IN FEET														
CARS — AVERAGE PER CAR														

REMARKS:

SCALER

Of Single Duplicate or Tripli-
cate Log Tally Ticket (with-
out Loose Carbon Sheets)
used in the

Gibson Aluminum Tally Book Covers

MANUFACTURED BY:

HARDWOOD RECORD

537 S. Dearborn Street

CHICAGO

Let us send you catalogue and
price list of scores of forms of
lumber, flooring and log tally
tickets.

The Gibson Tally Book System
has more than 2,500 users.

Corrugated Joint Fasteners

Can be quickly and cheaply driven with

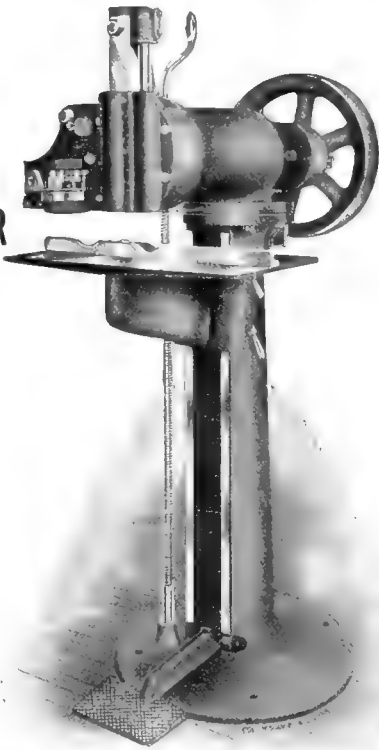
"ADVANCE" CORRUGATED JOINT FASTENER MACHINE

Made in Different
Types to Meet
All Conditions

Specially suitable for
manufacturers of
sash, doors, blinds,
screens, coffins,
furniture, plumbers'
wood-work, porch
columns, boxes,
refrigerators, etc.

Write for bulletins
and prices.

Manufactured only
by



Saranac Machine Co., St. Joseph, Michigan

ELEPHANT RUBBER BELTING

AIR DRILL AND AIR TOOL

HOSE

STEAM
WATER
SUCTION

EXTRA QUALITY

Recommended for hard service
and guaranteed to do the work

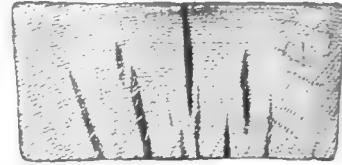
SELLING AGENTS

CRANE COMPANY • • ALL BRANCHES
STANDARD EQUIPMENT CO., MOBILE, ALA
ALBANY MILL SUPPLY CO., ALBANY, GA.

**THE MECHANICAL
RUBBER COMPANY**

(Chicago Rubber Works)

307 W. Randolph Street, CHICAGO
ESTABLISHED 1882



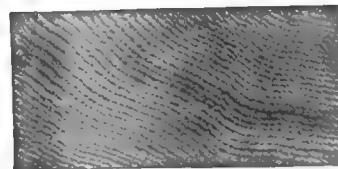
If you attempt to dry two-inch oak in your kiln in fourteen days the result will probably resemble the above illustration.

The lower picture is from a photograph of two-inch oak dried by the Grand Rapids Veneer Works Process in fourteen days, and every plank as sound as the sample.

The absence of checks is not the only saving due to this process. The lumber is straight, soft and free from sap or acids.

For a small sum of money your old kilns can be converted to G. R. V. W. Process Kilns, with a guarantee to give the results above described.

**Grand Rapids Veneer Works
GRAND RAPIDS, MICH.**



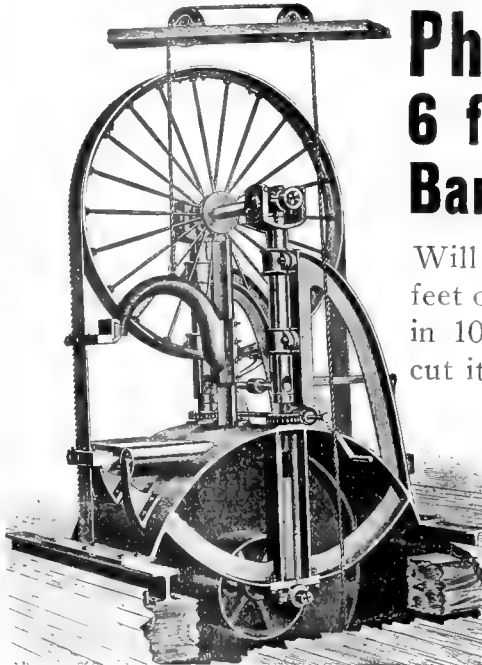
"CLYDE - GRADE Than which there is None better."

It doesn't seem possible to build Logging Machinery of greater economy and efficiency than that described and illustrated in this new catalog of ours - but of course if it ever becomes possible, we will build it.

Our FACTORY at DULUTH

Ask for CATALOG No. 1. THE NEW ONE

CLYDE IRON WORKS
Manufacturers at DULUTH, Minnesota, U.S.A. of
CLYDE - GRADE Logging and Hoisting Machinery.



Phoenix 6 ft. Pony Band Mill

Will cut 30,000 feet of 1" lumber in 10 hours and cut it good.

Nearly 200 of these mills sawing wood in the U. S. A.

PRETTY GOOD RECOMMENDATION, ISN'T IT?

MODERATE PRICE

PHOENIX MFG. CO.
EAU CLAIRE WISCONSIN



Avoid Liability

And risks of maiming your employees. Use our Power Feed Band Ripsaw

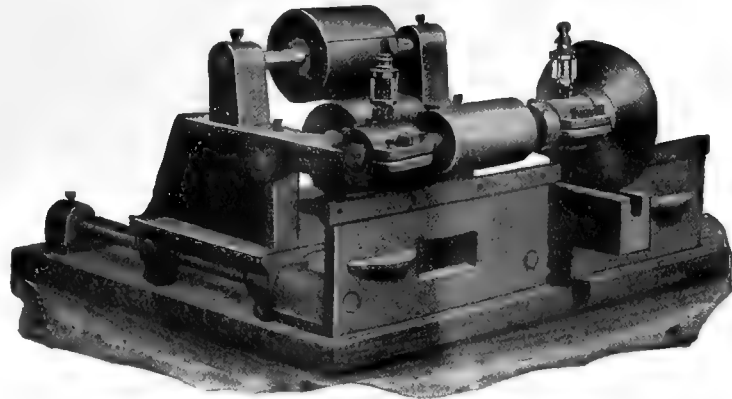
A Specially - Not a Side Line

WM. B. MERSHON & CO.
SAGINAW, MICHIGAN



Dangerous Circular Ripsaws.

Power Feed Band Ripsaw No. 1.



BUTTING SAW

for
Flooring Factories

For cutting out defects and making square and smooth ends for end-matching machines. Used by the largest producers. Write for particulars and prices.

Manufactured by
Cadillac Machine Co.
CADILLAC, MICH.

VENEERS AND PANELS

The Central Veneer Co.

SOFT YELLOW POPLAR
CROSS BANDING

Huntington, West Virginia

Hoffman Brothers Company

Sliced and Sawed, Quartered
and Plain Red and White
Oak and Mahogany

Walnut Cherry Ash Maple

Let us send you Stock List FORT WAYNE, IND.

SECURE BETTER PRICES

AT LESS SELLING COST BY REACH-
ING MORE CUSTOMERS. HARDWOOD
RECORD PUTS YOU BEFORE THEM
ALL TWICE A MONTH.

ASK US ABOUT IT

B. C. JARRELL & CO.

MANUFACTURERS OF

Rotary-Cut Gum and Poplar

VENEERS

Well manufactured, thoroughly
KILN DRIED and FLAT

HUMBOLDT, - TENNESSEE

KANSAS CITY, MO.

HELENA, ARK.

VENEERS

PENROD WALNUT & VENEER COMPANY

General Offices, KANSAS CITY, MO.

KENTUCKY VENEER WORKS

ROTARY CUT SAWED AND SLICED
GUM, POPLAR, OAK QUARTERED OAK, MAHOGANY
LOUISVILLE, KENTUCKY

*Sheppard Veneer Co., Poplar
Winston-Salem, N.C.
Centers, Cross Banding, Drawer Bottoms.*

For Veneer and Panel Manufacturers

Your Consumers' Lists Cost You BIG MONEY

We can save it all and relieve you of all the detail and effort necessary to tabulate consumers' wants. Our Card Index System of those wants, just out, is the result of systematic effort. It is endorsed by your competitor.

Can You Afford to Give Him that Advantage?

HARDWOOD RECORD

CHICAGO

VENEERS AND PANELS

Ahnapee Veneer & Seating Co.

HOME OFFICE, FACTORY AND VENEER MILL, ALGOMA, WIS.
VENEER AND SAWMILL, BIRCHWOOD, WIS.

We manufacture at our Birchwood plant single ply veneers of all native northern woods and deliver stock that is in shape to glue.

From our Algoma factory, where we have specialized for twenty years, we produce panels of all sizes, flat or bent to shape, in all woods, notably in Mahogany and Quarter-Sawed Oak.

We make no two-ply stock, and do not employ sliced cut quartered oak. Our quartered oak panels are all from sawed veneer.

Every pound of glue we use is guaranteed hide stock. We do not use retainers. Our gluing forms are put under powerful screws and left until the glue has thoroughly set.

If you seek a guaranteed product that is the best, based on results accomplished by most painstaking attention and study of every detail, combined with the use of the best stock and an up-to-date equipment, our product will appeal to you.

If you are a "price buyer" we probably cannot interest you.

KIEL WOODEN WARE CO.

WHEN IN THE MARKET FOR ROTARY CUT

BIRCH
BASSWOOD
OAK
ASH
ELM

VENEER

Write Us

MELLEN
VENEER AND HEADING
MILL

← **WISCONSIN** →

KIEL
FACTORY AND MAIN
OFFICE

PANELS PANELS PANELS

In Stock at Chicago Warehouse, 1140 West Lake Street
Telephone Haymarket 3027

WE WANT TO MOVE BEFORE JANUARY 1

3 PLY GOOD 1 SIDE

3/16 Ash 24 x 60	1/4 Ash 24 x 60	1/4 Basswood 24 x 60
30 x 60	30 x 72	

The Wisconsin Seating Company,

New London, Wis.

HOWARD HANSON, President

THOMAS A. TURNER, Secy. and Treas.

THE HANSON-TURNER COMPANY

MANUFACTURERS OF

ROTARY CUT VENEER AND THIN LUMBER

ELM
BEECH
CURLY BIRCH

OAK
MAPLE

BIRCH
BASSWOOD
BIRD'S-EYE MAPLE

SPECIALTIES:

DRAWER BOTTOMS BACK PANELS CENTER STOCK
BACKING PIANO PIN BLOCKS BIRCH DOOR STOCK
CURLY BIRCH BIRD'S-EYE MAPLE

OFFICE and FACTORY at WELLS, N. Y.

VENEERS AND PANELS

Veneers and Panels with a Reputation

WE manufacture Veneers in all the native woods and for all purposes. Also Built-up Panels in native and foreign woods—three and five-ply—and have established a reputation for furnishing high-grade material. Send us your inquiries and orders and become one of our satisfied customers.

Underwood Veneer Co.

Wausau, Wis.

“SOVEMANCO.”

We can furnish anything you want in

Sawed and Sliced Foreign and Domestic Figured Veneers

Capacity 15 million feet per year. Ready to take care of carload orders promptly. Small orders shipped same day received, if desired.

SOUTHERN VENEER MFG. CO., Inc.

Office, 21st and Standard.

LOUISVILLE, KY.

Mills, Magnolia, Standard and 21st Sts.

I
M
P
O
R
T
E
R
S



M
A
N
U
F
A
C
T
U
R
E
R
S



CIRCASSIAN MAHOGANY

**ROSEWOOD OAK BIRCH
WALNUT PANELS**



R.S. BACON VENEER Co.
BEST VALUE

ANN AND WEST LAKE STS.

:: :: ::

CHICAGO



MICHIGAN

FAMOUS FOR HARD MAPLE AND GREY ELM



"Ideal" ^{Steel Burnished} Rock Maple Flooring

is the flooring that is manufactured expressly to supply the demand for the best. It is made by modern machinery from carefully-selected stock and every precaution is taken throughout our entire system to make it fulfill in every particular its name—"IDEAL."

ROUGH OR FINISHED LUMBER—ALL KINDS

Send Us Your Inquiries

The I. Stephenson Company - WELLS, MICHIGAN

IXL ROCK MAPLE FLOORING

Birch and Selected Red Birch



"The Standard" of Excellence

Wisconsin Land & Lumber Company Hermansville, Michigan

BIRCH, ASH, ELM, BASSWOOD AND HEMLOCK LUMBER
Basswood Siding, Ceiling, and Moulding

Von Platen Lumber Co.

Iron Mountain, Michigan

Manufacturers of

**BIRCH
BASSWOOD
ELM
MAPLE**

We Solicit Your Inquiries

SHIPMENTS VIA C. & N. W.—C., M. & ST. P.—W. & M.

SALLING, HANSON CO.

MANUFACTURERS OF

Michigan Hardwoods

GRAYLING, MICHIGAN

"Chief Brand" Maple and Beech Flooring

in $\frac{3}{4}$, $\frac{5}{8}$ and 13-16 and 1 1-16 inch Maple in all standard widths and grades, will commend itself to you and your trade on its merits alone

WRITE US, WE CAN INTEREST YOU

Kerry & Hanson Flooring Co.

GRAYLING, MICHIGAN

1sts & 2nds	4/4	175,000
MICHIGAN	5/4	195,000
MAPLE	8/4	150,000
	10/4	75,000
	12/4	50,000
For shipment from our Detroit Yard during October and November.	16/4	110,000

PLEASE WRITE US QUICKLY FOR PRICES

THOMAS FORMAN COMPANY
DETROIT

S. L. EASTMAN FLOORING CO.

SAGINAW BRAND

MAPLE FLOORING

SAGINAW, MICH.

J. & J. VINKE

Agents for the Sale of

AMERICAN HARDWOODS IN LUMBER AND LOGS
AMSTERDAM, HOLLAND

THE SOUTH

PROMINENT SOUTHERN MANUFACTURERS

A FEW ITEMS OF DRY STOCK

We Want to Move

2 cars 4/4 1st & 2nds Cypress.
2 cars 4/4 select Cypress.
4 cars 4/4 No. 1 Shop Cypress.
1 car 2" 1sts & 2nds Cypress.
1 car 2" Select Cypress.
1 car 4/4 1sts & 2nds Cottonwood.
5 cars 3" mixed oak Crossing Plank.

10 cars 4/4 1sts & 2nds Red Gum.
2 cars 5/4 No. 1 Common Ash.
2 cars 4/4 1sts & 2nds Ash.
1 car 2" 1sts & 2nds Ash.
2 cars 4/4 18" & wider Panel Cottonwood.
8/4 to 16/4 No. 1 Common and better Plain Red and White Oak.

BAKER-MATTHEWS MFG. CO.
SIKESTON, MO.

WRITE US FOR PRICES

Frank Purcell Kansas City
U. S. A.

Exporter of **Black Walnut Logs**



**FIGURED WALNUT IN LONG WOOD
AND STUMPS**

GARETSON-GREASON LUMBER CO.
1002-1005 Times Bldg. ST. LOUIS

MANUFACTURERS

Three Mills

**Himmelberger-Harrison
Lumber Co.**

**Specialists
Red Gum**

Mills at
Morehouse, Mo.

Sales Offices
Cape Girardeau, Mo.

Salt Lick Lumber Co.

SALT LICK KENTUCKY

MANUFACTURERS OF

Eureka **Oak Flooring**
OAK AND BEECH

Complete stock of 3/8" and 13/16" in all standard widths

Louisiana Long Leaf Lumber Co.
Fisher, Louisiana

Diamond



Brand

OAK FLOORING
A GUARANTEE OF PERFECTION

IN spite of heavy demands for Tennessee Valley Hardwoods, we have a few items left:

2 cars 4/4 1s and 2s PLAIN RED OAK 10"—wider
4 cars 4/4 No. 1 Common PLAIN RED OAK 10"—wider
2 cars 8/4 1s and 2s PLAIN RED OAK 6"—wider
1 car 8/4 No. 1 Common PLAIN RED OAK 10"—wider
3/2 car 5/4 1s and 2s PLAIN RED OAK 6"—9 1/2"
3/2 car 6/4 1s and 2s PLAIN RED OAK 6"—9 1/2"
4 cars 4/4 No. 1 Common PLAIN WHITE OAK 4"—9 1/2"
3 cars 4/4 No. 1 Common PLAIN WHITE OAK 10"—wider
1 car 6/4 1s and 2s PLAIN WHITE OAK 6"—9 1/2"
1 car 6/4 1s and 2s PLAIN WHITE OAK 10"—wider
1 car 8/4 1s and 2s PLAIN WHITE OAK 6"—wider

The HHH Brand

H. H. HITT LUMBER COMPANY, DECATUR, ALABAMA

WE HAVE IT

W. W. DEMPSEY

Manufacturer and
Wholesaler of

HARDWOODS

BAND SAWED STOCK

A LINE BRINGS PRICE BY RETURN MAIL

General Offices
Johnstown, Pa.

New York Office
No. 18 Broadway

CHERRY
50 M ft. 4/4
No. 3
Common

CHESTNUT
100,000 feet
of 8/4 Sound
Wormy and
No. 2 Common.

CYPRESS
250,000 feet
of 4/4 No. 1
Common &
Better, Old
grading.

SPRUCE
4/4 and 8/4
Clear and
Select, 8/4
Box and Mill
Cull

WISCONSIN

WHERE THE FINEST NORTHERN HARDWOODS GROW

WE MANUFACTURE MICHIGAN
HARDWOODS AND HEMLOCK.
MILLS ELECTRICALLY
DRIVEN; STOCK
BAND SAWN

Have in Shipping Condition

BIRCH: NO. 2 AND BETTER, 4/4 to 12/4
ASH: NO. 2 AND BETTER, 4/4 to 12/4
ELM: NO. 2 AND BETTER, 4/4 to 12/4
BASSWOOD: NO. 2 AND BETTER, 4/4
to 12/4

WE are well equipped for manufacturing
special sizes, wagon stock, skids, ties, etc.

THE G. A. GOODYEAR LUMBER COMPANY
Office and Mill Logging Camp
TOMAH, WISCONSIN BLUE BILL, MICHIGAN

We want to move the following air-seasoned stock

5 cars 6 1/4" No. 2 Com. & Better Birch
3 cars 5 1/4" No. 2 Com. & Better Birch
1 car 8 1/4" No. 2 Com. & Better Birch
1 car 8 1/4" No. 1 Com. & Better Birch
3 cars 4 1/4" No. 1 Com. Birch
2 cars 4 1/4" No. 2 Com. Birch

OELHAFEN LUMBER CO.
TOMAHAWK, WISCONSIN

GET OUR PRICES ON

1 car 1" No. 1 Common & Btr. Red Birch.
10 cars 1" No. 2 Common & Btr. Plain Birch.
5 cars 1" No. 1 and No. 2 Common Plain Birch.
2 cars 1 1/4" No. 2 Common & Btr. Plain Birch.
2 cars 1 1/2" No. 2 Common Plain Birch.

Can ship in straight or
mixed cars with other lumber

ROBBINS LUMBER COMPANY
Rhineland, Wisconsin

SAWYER GOODMAN CO.

MARINETTE, WIS.

Mixed Cars of Hardwood, Bass-
wood, White Pine and Hemlock,
Cedar Shingles and Posts

We make a specialty of White Pine Beveled Siding and
White Pine Finish and Shop and Pattern Lumber

Brown Bros. Lumber Co.

Manufacturers
and Wholesalers

Rhineland, Wis.

1 " No. 1 Com. & Btr. Hard Maple
1 1/4" No. 2 Com. & Btr. Hard Maple
1 1/2" No. 2 Com. & Btr. Hard Maple
2 " No. 1 Com. & Btr. Hard Maple
2 1/2" No. 2 Com. & Btr. Hard Maple
3 " No. 1 Com. & Btr. Hard Maple

DRY STOCK
AND CAN
MAKE
PROMPT
SHIPMENT

IF YOU HAVEN'T SEEN THE GIBSON TALLY BOOK

Let us send you one on approval, with samples of Tally Tickets for triplicate,
duplicate or single tallies—a score of forms to choose from. They are the
latest and best. Endorsed by hundreds of lumber manufacturers and buyers.

HARDWOOD RECORD

CHICAGO

BUFFALO

The Foremost Hardwood Market of the East

ORSON E. YEAGER

SPECIALTIES:

Oak, Ash and Poplar

932 ELK STREET

ANTHONY MILLER

**HARDWOODS
OF ALL KINDS**

893 EAGLE STREET

**G. ELIAS & BRO.
HARDWOODS**

White Pine, Yellow Pine, Spruce,
Hemlock, Fir, Lumber, Timber, Mill-
work, Boxes, Maple and Oak Flooring

955-1015 ELK STREET

Hugh McLean Lumber Co.

OUR SPECIALTY:

**QUARTERED
WHITE OAK**

940 ELK STREET

I. N. Stewart & Bro.

Specialties

Cherry and Oak

892 Elk Street

Standard Hardwood Lumber Co.

**OAK, ASH and
CHESTNUT**

1075 Clinton Street

BUFFALO HARDWOOD LUMBER CO.

We want to buy for cash

OAK, ASH AND OTHER HARDWOODS

All grades and thicknesses.
Will receive and inspect stock at shipping point.
Branch yard, Memphis, Tenn.

940 Seneca Street,

BUFFALO

T. SULLIVAN & CO.

SPECIALTIES:

Gray Elm, Brown Ash

Pacific Coast Fir and Spruce

2 ARTHUR STREET

The above firms carry large and well assorted stocks of all kinds and grades of Hardwoods, and have every facility for filling and shipping orders promptly. They will be pleased to have your inquiries.

Vansant,

Manufacturers Old-Fashioned

Soft

Yellow

Poplar

5-8 and 4-4
in Wide Stock,
Specialty

Kitchen &

Company

Ashland, Kentucky

EASTERN REPRESENTATIVE, John L. Cochran
601 W. 115th Street, New York City

CHICAGO OFFICE, Steger Building
W. H. Matthias, Manager.

HERE IS SOME OF THE STOCK WE HAVE ON HAND FOR PROMPT SHIPMENT:

POPLAR

PANEL AND NO. 1

5 8 18"-23", 3 cars.
5 8 24"-27", 3 cars.
5 8 28" & up, 1 car.
4 4 18"-19", 1 car.
4 4 18"-23", 2 cars.
4 4 28" & up, 3 cars.

1S AND 2S

4 4, 5 cars.
5 4, 2 cars.
8 4, 1 car.
4 4 7"-11", 3 cars.
4 4 12"-17", 3 cars.

1S AND 2S—ONE FACE

4 4, 3 cars. 5 4, 1 car. 6 4, 1 car.
4 4 Clear Sap, 7"-9", 2 cars.

Special Selects:

4 4, 3 cars.
5 4, 1 car.
6 4, 1 car.
4 4 No. 1 Common, 4 cars.
4 4 No. 2 Common, 2 cars.
4 4 Quartered 1s & 2s, 4 cars.

Dimension:

Assortment any mixed cars.

Bevel Siding:

No. 1, 4", 1 car.
No. 1, 6", 2 cars.
Selects, 6", 2 cars.
No. 1 Common, 4", 1 car.
5", 4 cars.
6", 1 car.

Drop Siding:

Selects, 4", 2 cars.
5", 3 cars.
No. 2 Common, 6", 2 cars.

WHITE OAK

Clear Face Strips, 10'-12', 1 car.

QUARTERED OAK

4 4 1s & 2s, 6" & up, 5 cars.
4 4 No. 2 Common, 2 cars.
4 4 Clear Face Strips:
10'-12', 1 car.
14'-16', 2 cars.

RED OAK

5 4 1s & 2s, 2 cars.
6 4 1s & 2s, 2 cars.
5 4 No. 1 Common, 1 car.
4 4 Clear Face Strips:
10'-12', 1 car.
14'-16', 1 car.

ALL BAND SAWED AND OUR OWN MANUFACTURE

W. M. RITTER LUMBER CO., COLUMBUS, OHIO

W. H. White Company Boyne City Lumber Company

Mills and General Office: BOYNE CITY, MICH.

Sales Office: BUFFALO, N. Y.

STOCK DRY—STANDARD GRADES—BEST
MANUFACTURE—CAR OR CARGO SHIPMENTS

WE OFFER

4/4 and 5/4 No. 2 common and better
Basswood

4/4 No. 2 common and better Brown
Ash

4/4 and 5/4 No. 2 common and better
Birch, strictly unselected for color

4/4 and 5/4 No. 1 and No. 2 common
Flooring Maple.

4/4, 5/4, 6/4, 8/4, 10/4, 12/4 and 16/4
Firsts and Seconds Maple

YELLOW POPLAR

MANUFACTURERS OF BAND SAWED

POPLAR
QUARTERED OAK
PLAIN OAK
CHESTNUT
BASSWOOD



SPECIALTY
QUARTER SAWED
WHITE OAK

Coal Grove, Ohio, U. S. A.

LUMBER CO.

Aardwood Record

Eighteenth Year, }
Semi-Monthly. }

CHICAGO, DECEMBER 10, 1912

{ Subscription \$2.
Single Copies, 10 Cents. }

LARGEST VENEER PLANT IN THE WORLD

C. L. WILLEY

MANUFACTURER OF

MAHOGANY, VENEER

HARDWOOD LUMBER

OFFICE, FACTORY AND YARDS:

2558 South Robey Street

Telephone Canal 930

BAND MILLS, MEMPHIS, TENN.

CHICAGO

W A N T E D

All Kinds of High-Grade

HARDWOODS

S.E. SLAYMAKER & CO.

Representing
WEST VIRGINIA SPRUCE LUMBER CO.,
Cass, West Virginia.

Fifth Ave. Bldg.,
NEW YORK

The Burning Question of Fire Insurance

IS BEST ANSWERED BY THE ECONOMICAL AND RELIABLE TRADE MUTUALS



INDIANA LUMBERMEN'S MUTUAL INSURANCE CO. of Indianapolis, Ind.

LUMBERMEN'S MUTUAL INSURANCE CO. of Mansfield, Ohio

THE LUMBER MUTUAL FIRE INSURANCE CO. of Boston, Mass.

PENN. LUMBERMEN'S MUTUAL FIRE INSURANCE CO. of Philadelphia, Pa.

CENTRAL MANFRS. MUTUAL INSURANCE CO. of Van Wert, Ohio



Average rate of dividend to Policy Holders, now 36%

HOLLOWAY HARDW&D LUMBER CO.

NOT INCORPORATED

20 W. Jackson Blvd., CHICAGO

SPECIAL ITEMS FOR IMMEDIATE SHIPMENT

INDIANA WHITE OAK	65,000 ft. 8/4 No. 1 Com.	100,000 ft. 2x6 & wider
40,000 ft. 12/4 1st and 2nd	Plain White Oak, bone dry.	Sound Com. White Oak.
Plain White Oak, bone dry.	150,000 ft. 4/4 1st and 2nd	SOFT ELM
55,000 ft. 10/4 1st and 2nd	Plain White Oak, bone dry.	3 cars 8/4 Common and
Plain White Oak, bone dry.	85,000 ft. 4/4 No. 1 Common	Better Soft Elm.
60,000 ft. 8/4 1st and 2nd	Plain White Oak, bone dry.	2 cars 12/4 Common and
Plain White Oak, bone dry.	15,000 ft. 10/4 No. 1 Com.	Better Soft Elm.
20,000 ft. 12/4 No. 1 Com.	Plain White Oak, bone dry.	50,000 ft. 5/4 Log Run Soft
Plain White Oak, bone dry.		Elm.

We have a good assortment of band sawn Cottonwood, Ash, Cypress, Sap Gum and plain and quartered Red Gum. Wire or write for prices for prompt shipment

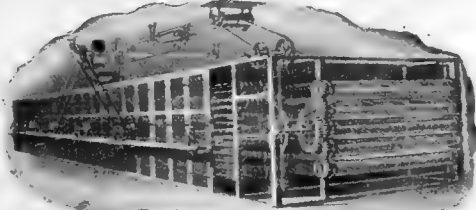
DAILY CAPACITY

Red Gum, 50,000 ft.
Cypress, 30,000 ft.
Oak, 40,000 ft.
Ash, 20,000 ft.
Cottonwood, 30,000
Miscellaneous,
15,000 ft.

PROCTOR VENEER DRYER FIREPROOF

—AN—
UNPARALLELED SUCCESS

No
Splitting
Nor
Checking
No
Clogging
Nor
Adjusting



Recom-
mended by
all those
who
have tried
it

THE PHILADELPHIA TEXTILE MACHINERY COMPANY
DEPT. L HANCOCK & SOMERSET STS. PHILA PA.

Long-Knight Lumber Co.

Indianapolis, Indiana

HARDWOODS

OAK ASH GUM CYPRESS

1 Car 2" No. 2 Common Walnut. 1 Car 5 4 No. 1 Common Walnut.
1 Car 5 4 Common Walnut. 1 Car 2" 1st and 2ds Plain Red Oak.
40,000 ft. African Mahogany, 1" to 2".

Don't Delay Placing Your Lumber Orders

There's always danger of disappointment when you let the order go until just a few days before you require the lumber; transportation is not always reliable and no matter how prompt the shipment, you run a risk.

However, it is one of the strong points of the McILVAIN Service to make prompt shipments, and RUSH orders are always given the attention they demand.

So let us talk Lumber with you, and bid on your specifications.

J. GIBSON McILVAIN & Co.
1420 Chestnut Street **PHILADELPHIA**

Timber Talks

1880 (stumpage worth \$1 to \$2)—Capital: "I have been offered a large tract of white pine timber at a low price. I think I'll buy."

Timid Friend: "Don't. There never will be a market for all that timber."

1890 (Southern pine stumpage worth 50 cents to \$1)—Capital: "I have an option on a fine body of yellow pine timber down South. Guess I shall take it up."

Timid Friend: "Don't. That timber is not worth it, and may not be in our day. Now, if you could buy timber at that price up North, I would advise you to do it."

1912 (Western stumpage worth \$1 to \$2)—Capital: "I am offered a fine tract of Western timber; the trees are big and stand thick. I am considering the advisability of making an investment."

Timid Friend: "Don't. There is too much timber out there and it is too far away. Now, if you could buy at that price down South, I should say, 'Go to it.'"

And it may have been the same timid friend that gave all this

ABSURD ADVICE

It was not more absurd in 1880 or 1890 than it is today, but seems so in view of the great advances in timber values North and South.

Today Northern pine is worth \$8 to \$14 a thousand feet, and an estimate will show twice as much timber as it would have shown in 1880. More of the timber is valuable. Yellow pine is worth \$3 to \$6 a thousand feet, with a like increase in the quantity that can be marketed at a profit.

Western timber has passed the day of acre valuation and now is offered at low prices by estimated thousands of feet. The price of Western timber will follow in the footsteps of that of the North and the South.

For information regarding present opportunities, address

James D. Lacey & Company

TIMBER LAND FACTORS

CHICAGO

PORTLAND

SEATTLE

MICHIGAN

FAMOUS FOR HARD MAPLE AND GREY ELM

Michigan Hardwoods

MANUFACTURED BY

COBBS & MITCHELL, Inc.

CADILLAC, MICH.

November 26th, 1912

DRY STOCK LIST

4/4 Basswood No. 1 Common.....	100 M
4/4 Birch 1s & 2s Red Curly and Wavy.....	10 M
4/4 Cherry No. 3 Common & Better.....	9 M
4/4 Cadillac Gray Elm 1s & 2s.....	20 M
4/4 Cadillac Gray Elm No. 1 Common.....	47 M
4/4 Cadillac Gray Elm No. 2 Common.....	60 M

"It is not what lumber costs you, so much as what you can get out of it, that decides its value for your work."

OUR OWN MANUFACTURE

W. D. YOUNG & CO.

MANUFACTURERS

FINEST MAPLE FLOORING

KILN DRIED, HOLLOW BACKED
MATCHED OR JOINTED
POLISHED AND BUNDLED

Hard Maple, Beech and Birch Lumber

1 TO 6 INCHES THICK

WRITE FOR PRICES

BAY CITY, MICHIGAN

Something New For Your Factory Floors

Utility Joined With Economy

We are now manufacturing what we call a No. 2 Factory grade of Hardwood Flooring which can be used successfully in factory buildings where good wearing qualities rather than appearance are required. This Flooring is made from the hardest portion of the log, and while the Flooring shows the heart defect to a considerable extent, nevertheless it will wear with wonderful durability. It is "Rockhard" flooring at a rock bottom price.

It is 13/16 x 2 1/4" face, and the Flooring is kiln dried, hollow backed, bored, end matched, steel scraped and bundled.

Write us about it. This is a grade of Hardwood Flooring you should know about. Address MITCHELL BROTHERS COMPANY, Sales Department, CADILLAC, MICHIGAN.

THE Kneeland-Bigelow Co.

300,000 Feet

5/4 No. 2 Common and Better Beech

HARDWOOD MANUFACTURERS

250,000 ft. 5/4 No. 1 Common Basswood

This is of good average widths and lengths, containing a large percentage of 16 ft.

All of the above stock is nicely manufactured, being hand sawed, trimmed, and well seasoned. We are prepared to quote attractive prices for this material for immediate shipment.

BAY CITY, MICH.



FLANNER-STEGER LAND & LUMBER CO. MAPLE AND BIRCH FLOORING

of unexcelled manufacture and quality. Also Manufacturers of Basswood, Birch, Elm, Maple and Hemlock.

SEND US YOUR INQUIRIES

MILLS:
BLACKWELL, WISCONSIN

GENERAL SALES OFFICE
1704 STEGER BLDG., CHICAGO, ILL.

HARDWOOD AND YELLOW PINE LUMBER

***In Stock, Ready
To Ship***

3 cars 1x6 and wider 1st & 2nd Cottonwood
3 cars 1x9 to 12" Cottonwood Box Boards
4 cars 1" No. 1 Common Cottonwood
4 cars 1" No. 1 Common Sap Gum

WE make
a spe-
cialty of Oak
Timber and
Car Stock.

WRITE US FOR PRICES ON YELLOW PINE TIMBER, FLOORING, CEILING AND FINISHING.
SCHULTZ, HOLLOWAY CO., 343 South Dearborn Street, CHICAGO

IF YOU HAVEN'T SEEN THE GIBSON TALLY BOOK

Let us send you one on approval, with samples of Tally Tickets for triplicate, duplicate or single tallies—a score of forms to choose from. They are the latest and best. Endorsed by hundreds of lumber manufacturers and buyers.

HARDWOOD RECORD

CHICAGO

CHICAGO

THE GREATEST HARDWOOD MARKET IN THE WORLD

HUDDLESTON-MARSH LUMBER COMPANY

(Successors in Chicago to OTIS MANUFACTURING CO.)

2254 LUMBER STREET, CHICAGO

Mahogany Lumber

Mexican and Cuban. 1s
& 2s, No. 1 Com., Shorts.
All thicknesses. Plain and
Figured.

Mahogany Veneer

Mexican and African.
Sawed and sliced. All
thicknesses. Figured and
Plain.

Circassian Walnut Lumber and Veneer.

Qtd. R. & W. Oak Veneer Plain R. & W. Oak Veneer
BIRCH, GUM, POPLAR, AND BASSWOOD VENEER
ALL IN OUR CHICAGO YARD.
PROMPT SHIPMENT ASSURED.

One Reason for Our Success

Our Customers Are Satisfied and Come Back

You are going to need Veneer in the near future, so let us have your inquiries for the following woods:

Mahogany	Yellow Poplar
Circassian	Pine
Curly Birch	R. C. Red & White Oak
Walnut Butts	R. C. Birch

And Quartered Oak Sawn and Sliced

Veneer Manufacturers Company
Fulton and May Streets, Chicago, Ill.

J. RAYNER VENEERED PANELS

ALL WOODS
SEND FOR STOCK LIST

MAHOGANY LUMBER

CARROLL AVE. AND SHELDON ST.
CHICAGO

A floor to adore



For thirty-three years Wilce's Hardwood Flooring has been among the foremost on the market and because it stands today "unequaled" is the best evidence that its manufacturer has kept abreast of modern methods and the advanced demands of the trade. To convince yourself of the above statements, try our polished surface flooring, tongued and grooved, hollow backed, with matched ends and holes for blind nailing—you'll find it reduces the expense of laying and polishing.

Our Booklet tells all about Hardwood flooring and how to care for it—also prices—and is free.

The T. Wilce Company

22nd and Throop Sts. CHICAGO, ILL.

Estabrook-Skeelee Lumber Co.

MANUFACTURERS AND DEALERS IN

Maple, Birch, Elm, Basswood, Ash
And Other Northern Hardwoods

In the Market for Round Lots of Hardwood

WRITE US BEFORE SELLING

Fisher Building, - - - CHICAGO

'PHONE HARRISON 1984

SAVE YOUR MONEY BY USING THE

RED BOOK

Published Semi-annually
in February and August

It contains a carefully prepared list of the buyers of lumber in car lots, both among the dealers and manufacturers.

The book indicates their financial standing and manner of meeting obligations. Covers the United States, Alberta, Manitoba and Saskatchewan. The trade recognizes this book as the authority on the lines it covers.

A well organized Collection Department is also operated and the same is open to you. Write for terms.

Lumbermen's Credit Assn., ESTABLISHED 1878

608 So. Dearborn St.
CHICAGO

Mention This Paper.

116 Nassau Street
NEW YORK CITY

Going up—Hardwood Timber

We have the following hardwood and pine timber for sale at prices that have not as yet been advanced with the rise in value on timber lands. For a short time we offer—

150,000,000 FEET HARDWOOD IN SOUTHEAST ARKANSAS — A SPLENDID OPPORTUNITY.

7,600,000 FEET OF HARDWOOD IN SOUTH-WEST ARKANSAS

We also have timber in British Columbia and on the Pacific Coast and Oregon.

For further particulars, address

John C. Spry

Room 1003 Harris Trust Bldg.,

Chicago, Illinois

KNOXVILLE

Famous for Finest Type of Poplar, Oak and Chestnut

VESTAL LUMBER AND MANUFACTURING CO. KNOXVILLE, TENNESSEE.

QUARTERED WHITE OAK OUR SPECIALTY

MANUFACTURERS OF
QUARTERED WHITE OAK, PLAIN OAK, POPLAR, WALNUT & TENNESSEE RED CEDAR LUMBER
BAND MILLS AT VESTAL, A SUBURB OF KNOXVILLE. SOUTHERN AND LOUISVILLE & NASHVILLE RAILROAD

H. S. MIZNER,
Pres.

C. C. CANNON,
Vice-Pres.

J. M. LOGAN,
Gen'l Manager

C. R. SWANN,
Sec'y and Treas.

LOGAN-MAPHET LUMBER CO.

MANUFACTURERS AND WHOLESALERS
HARDWOODS AND PINE
POPLAR A SPECIALTY

Main Office and Yards: Knoxville

Branch Office and Yard:

Bank and McLean Ave., Cincinnati I. M. ASHER, Mgr.

We Want Orders for the following Dry Stock:
WHITE OAK—Plain or Quartered.

RED OAK—Plain or Quartered.

CHESTNUT

BASSWOOD

POPLAR

WHITE PINE

Always carry large well
assorted stock of all
kinds of Hardwoods.

CAN SHIP ON SHORT NOTICE.

Maphet & Shea Lumber Co. Manufacturers and Wholesalers

OFFICE: 703-705 HENSON BUILDING

Yard: Middlebrook Pike and
Lonsdale Car Line

KNOXVILLE, TENN.

WE WANT TO MOVE

3 cars 4/4 No. 1 Common Poplar, 7" & up
2 cars 4/4 Clear Sap Poplar, 7" & up
1 car 4/4 Select Poplar, 7" & up
1 car 4/4 1 & 2 Red Oak, 10" & up
1 car 4/4 1 & 2 Chestnut
1 car 4/4 No. 1 Common Chestnut

We manufacture: YELLOW POPLAR,
OAK, CHESTNUT, WHITE AND YEL-
LOW PINE, HEMLOCK BARK, ETC.

BAND AND CIRCULAR MILLS—EAST TENN.
MOUNTAIN VIRGIN HARDWOOD STUMPAGE

"THE VERY BEST" Red Birch

Knoxville Veneer Co.

P. B. RAYMOND, General Manager, Knoxville, Tenn.

Kimball & Kopcke Knoxville, Tennessee

Manufacturers and Shippers of

Appalachian Hardwoods
OAK OUR SPECIALTY

NASHVILLE

CELEBRATED FOR HIGHEST TYPE TIMBER GROWTH, FAULTLESS MANUFACTURE AND GOOD GRADES.

If you want to get in touch
with 2000 Live Wire
Buyers of Hardwoods

it will pay you to find out about
the Hardwood Record's

BULLETIN SERVICE

One man, who uses the service
gives it credit for earning annu-
ally \$10,000 for him.

Write for pamphlet—

"Selling Lumber By Mail"

It will prove a revelation to you.

HARDWOOD RECORD

(Bulletin Dept.)

537 So. Dearborn St.,
CHICAGO

We will name very attractive
prices on a few cars of each of the
following items:

4 4, 6 4, 10 4 and 12 4 1s and 2s Poplar.
4 4 and 8 4 Sap Poplar.
12, 14, 16 and 20" No. 1 Common Poplar.
4 4 No. 1 and Panel Poplar in widths of 12 to 17", 18 to 23"
and 24" and up
4 4 x 13 to 17" Poplar Box Boards.
4 4 1s & 2s Basswood or Linn—very fine.
3/8, 4/4, 5/4, 10/4 and 12 4 1s & 2s Qtd. W. Oak.
4/4, 5/4, 6/4 and 8/4 No. 1 Common Qtd. W. Oak.
6/4 1s & 2s Qtd. R. Oak.
4/4, 5/4 and 6/4 No. 1 Common Qtd. R. Oak.
6 4 and 10 4 1s & 2s Hickory.
4/4, 6/4, 10/4 and 12 4 No. 1 Common Hickory.
4/4, 6/4, 8/4, 10/4 and 12 4 No. 2 Common Hickory.
4 4 1s & 2s Chestnut, also 5, 6 and 8/4.
4 4 No. 1 Common Chestnut.

John B. Ransom & Co.

MANUFACTURERS OF

Hardwood Lumber

Nashville, Tenn.

IF YOU BUY LUMBER

Naturally you want only well manufactured stock, clean
grades and prompt service. We can give you all three.

We have a well assorted stock of Plain and
Quartered Red and White Oak, Poplar, Ash,
Chestnut, Hickory and Aromatic Tennessee
Red Cedar, practically all of which is our
own manufacture.

LOVE, BOYD & CO., Nashville, Tenn.

Cherokee Lumber Co.

Manufacturers of all the lumber we sell.


Let us quote you some attractive prices
on quartered white oak and poplar.
Any grades and thicknesses.

NASHVILLE, TENN.

Tennessee Hardwoods

**Tennessee Hardwood
Lumber Co.**

West Nashville

 The Gibson Aluminum Tally Book Cover
and Tally Tickets are now employed by
more than 2,000 lumber manufacturers,
dealers and consumers.

Paepcke Leicht Lumber Company

CHICAGO

Southern Hardwoods

¶ We offer stock, produced by our band mills, from our own timber.

¶ We control absolutely the manufacture, piling, grading and shipping of our product and are thus able to assure our trade of uniformity of grades and manufacture.

SPECIALTIES:

RED GUM
SAP GUM

RED OAK
WHITE OAK

COTTONWOOD
YELLOW CYPRESS

SOFT ELM
WHITE ASH

Paepcke Leicht Lumber Company

CHICAGO

LAMB-FISH LUMBER CO.



Band Mill and General Offices

CHARLESTON,

MISS.

THE LARGEST HARDWOOD MILL IN THE WORLD
ANNUAL CAPACITY, 40,000,000

STOCK LIST—Dry Lumber on Hand December 1, 1912

TELEGRAPH
CODES
UNIVERSAL
HARDWOOD
WESTERN UNION
Cable Address, Lamb

	3/8	1/2	5/8	3/4	4 4	5 4	6 4	8 4	10 4	12 4	16 4
FAS Qrtd. White Oak.....	6,000	60,000	20,000	30,000	30,000	.....	7,000	.....	.....	.....	.....
No. 1 Com. Qrtd. White Oak.....	.....	12,000	.....	16,000	150,000	.....	.....	.....	.....	.....	.....
No. 2 Com. Qrtd. White Oak.....	.....	5,000	.....	.....	10,000	.....	.....	.....	.....	.....	.....
FAS Plain White Oak.....	30,000	100,000	120,000	60,000	.....	40,000	.....	4,000	3,000	.....	2,000
No. 1 Com. Plain White Oak.....	.....	.....	40,000	12,000	150,000	5,000	.....	3,000	9,000	.....	.....
FAS Plain White Oak, 12" & up.....	.....	.....	.....	4,000	.....	.....	.....	.....	.....	.....	.....
FAS Plain Red Oak.....	.....	.....	30,000	20,000	150,000	.....	.....	.....	.....	.....	1,000
No. 1 Com. Plain Red Oak.....	.....	18,000	25,000	50,000	.....	18,000	1,000	.....	.....	.....	.....
FAS Red Gum.....	200,000	150,000	110,000	250,000	220,000	40,000	60,000	40,000	.....	3,000	.....
FAS Circassian Red Gum.....	.....	.....	12,000	20,000	.....	3,000	1,000	.....	.....	.....	.....
No. 1 Com. Red Gum.....	60,000	20,000	130,000	40,000	50,000	50,000	20,000	8,000	.....	.....	.....
FAS Sap Gum, 18" & up.....	.....	.....	.....	80,000	.....	.....	.....	.....	.....	.....	.....
FAS Sap Gum, 6" & up.....	100,000	40,000	20,000	50,000	.....	15,000	10,000	10,000	.....	.....	.....
No. 1 Com. Sap Gum.....	.....	.....	100,000	150,000	200,000	40,000	.....	.....	.....	.....	.....
No. 2 Com. Sap Gum.....	50,000	30,000	25,000	100,000	.....	200,000	15,000	.....	.....	.....	.....
Shop & Better Cypress.....	.....	.....	.....	15,000	.....	.....	30,000	.....	.....	.....	.....
Log Run Elm.....	.....	.....	.....	60,000	.....	.....	.....	.....	.....	.....	.....
Com. & Btr. Tupelo.....	.....	.....	.....	40,000	.....	.....	.....	.....	.....	.....	.....

OUR LUMBER CONTAINS ALL WIDE STOCK PRODUCED IN MANUFACTURING AND WILL RUN OVER 50% OF 14 AND 16 FT. LENGTHS. WE ALSO MANUFACTURE OAK TIMBERS AND BRIDGE PLANK—FACILITIES FOR KILN DRYING AND DRESSING

"STEARNS" QUALITY LUDINGTON

HARDWOOD SPECIALISTS

LAST CALL FOR DRY STOCK

IF YOU PLACE YOUR ORDERS
NOW WE CAN SHIP PROMPTLY
BEFORE BAD WEATHER SETS IN

SEND US YOUR INQUIRIES FOR

4-4 to 16-4 Michigan Soft Gray Elm

The **STEARNS**
SALT & LUMBER CO. LUDINGTON, MICH.

BAND SAWN HARDWOODS

WE PRODUCE OUR OWN STOCKS

OAK—Plain and Quartered, Red and White

COTTONWOOD—Ash, Southern Elm, Gum, Soft Maple

A FEW ITEMS WE WANT TO MOVE:

- 100,000 feet 5/4" x 13" to 17" 1sts & 2nds Cottonwood.
- 110,000 feet 4/4" x 22" & up No. 1 & Panel Cottonwood.
- 200,000 feet 4/4" x 13" to 17" Cottonwood Box Boards.
- 75,000 feet 4/4" 1sts & 2nds Quartered White Oak.
- 97,000 feet 4/4" No. 1 Common Quartered White Oak.
- 115,000 feet 4/4" 1sts & 2nds Red Gum.
- 200,000 feet 4/4" to 8/4" No. 1 Shop & Better Cypress.

WRITE US FOR PRICES

ANDERSON-TULLY COMPANY
HARDWOOD LUMBER **Memphis, Tenn.**

WEST VIRGINIA

WHERE THE BEST HARDWOODS GROW

West Virginia Timber Company

POPLAR, OAK,
CHESTNUT AND BASSWOOD
LUMBER.
BELL OAK, HEMLOCK, CHAIR
AND
DIMENSION STOCK.

CHARLESTON, W. VA.

30,000 ft 4/4 Clear Saps Poplar.
50,000 ft. 4/4 No. 1 Common & Selects Poplar.
100,000 ft. 4/4 No. 2 "A" Common Poplar.
50,000 ft. 5/4 No. 1 Common Poplar.
50,000 ft. 6/4 No. 1 Common Poplar.
15,000 ft. 4/4 x 13-17" Poplar Box Boards.
17,000 ft. 4/4 x 9-12" Poplar Box Boards.
15,000 ft. 4/4 x 24 and up Panel & Wide Poplar.

20,000 ft. 6/4 No. 1 Common & Better Chestnut.
15,000 ft. 5/4 Log Run Basswood.
90,000 ft. 4/4 1sts & 2nds Red Gum.
75,000 ft. 4/4 No. 1 Common Red Gum.
50,000 ft. 4/4 1sts & 2nds Sap Gum.
60,000 ft. 4/4 Selects & Better Cypress.
50,000 ft. 4/4 No. 1 Common & Shop Cypress.
40,000 ft. 4/4 No. 2 Common Cypress.
25,000 ft. 8/4 No. 2 Common & Pecky Cypress.

Peytona Lumber Company

Inc.

WHOLESALE MANUFACTURERS

HARDWOOD LUMBER

HUNTINGTON, W. VA.

Yellow Poplar, Basswood, Chestnut, Oak, Ash

BAND MILL AND YARDS,
1st Ave. and 20th to 24th Sts.

10 cars 4/4 Select & No. 1 Com. Poplar (50% Selects,
60% 14' & 16' long).
4 cars 4/4 13" to 17" Poplar Box Boards (75% 14' &
16').
2 cars 4/4 No. 1 Panel Poplar, 18" to 23" (60% 14'
& 16').
1 car 4/4 No. 1 Panel Poplar, 24" & up (60% 14' & 16').

All high-grade band sawn stock. Good widths.

WE MANUFACTURE AND
DEAL IN

TIES, HARDWOOD LUMBER AND TIMBER

We want to buy a large
amount of 4/4, 8'—8'6"
Oak from Tie Sides

Hill Bros. Tie & Lumber Company
Charleston, W. Va.

The Central Veneer Co.

SOFT YELLOW POPLAR
CROSS BANDING

Huntington, West Virginia

How's This for a 1913 Platform?

"Resolved, That I will give to the purchase of my lumber the same discriminating care that I devote to manufacturing it into the finished product and distributing it to the trade in which I am interested.

"Resolved, That in ordering hardwood and veneer stocks I will remember the truthful saying that a man gets just about what he pays for, and that cheap lumber is usually cheap lumber.

"Resolved, That I will deal with concerns which have shown themselves to be square and honest in their dealings with me; with which I have no friction as to measurement or grade; which have the facilities for taking care of my orders, and which can fill orders promptly with material sufficiently aged to insure satisfactory use in my factory.

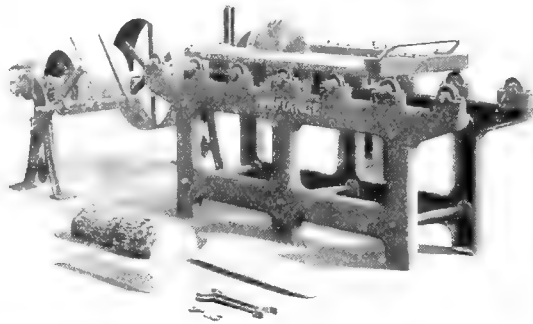
"Resolved, That I keep tab exactly on the results experienced in working lumber purchased from different concerns, to as great a degree as practicable, with the end of determining which of them have justly earned my permanent business."

We recommend the adoption of these resolutions for 1913 by every hardwood lumber buyer in the country. Our reason, to be perfectly frank, is this: It would mean a lot of new business for

The Louisville Hardwood Club

EDWARD L. DAVIS LUMBER COMPANY
OHIO RIVER SAWMILL COMPANY
NORMAN LUMBER COMPANY
BOOKER-CECIL COMPANY

LOUISVILLE POINT LUMBER COMPANY
W. P. BROWN & SONS LUMBER COMPANY
THE LOUISVILLE VENEER MILLS
C. C. MENGEL & BRO. CO.



No. 1 Spoke and Handle Blank Saw

than any other tools. During all these sixty-two years DEFIANCÉ engineers have conducted ceaseless investigation and experiments in order that our customers might benefit by the use of the best and most modern tools. Every idea or suggestion that gave the slightest promise of yielding an improvement in DEFIANCÉ machines has been considered and tried out. In fact,

NOTHING HAS BEEN LEFT UNDONE IN THEIR MAKEUP

Our policy of long service and efficiency will always characterize every tool that leaves our plant.

We want you to have one of our new catalogs, illustrating and describing all our tools. It will be well worth your time to investigate their worth

THE DEFIANCÉ MACHINE WORKS

414 Perry St., Defiance, Ohio

**There Has Been No Halting Place
FOR THE**

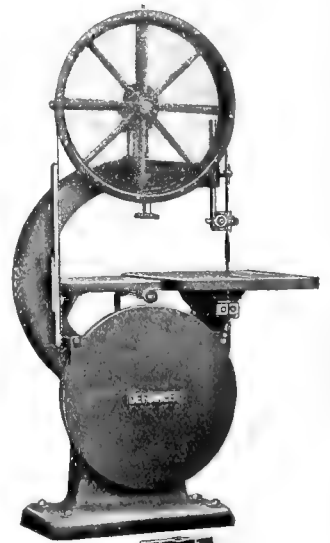
DEFIANCÉ

Wood-Working Machines

"The Imprint of Satisfaction"

Neither has there been a pause for complacent satisfaction.

They embody a longer period of woodworking experience



28" Band Saw (With Guards)

"CLYDE - GRADE Than which there is None better."

Nearly a thousand lumber companies have proved the economy and efficiency of skidding with the Clyde Skidder and loading with the McGiffert Log Loader. If you are not one of them you will be after you give us a chance to show you; and meantime it's costing you somewhere around \$25 a day to "do without!"

Our Seven Acre Factory at Duluth

Ask for CATALOG No. 1. THE NEW ONE.

CLYDE IRON WORKS
Manufacturers at DULUTH, Minnesota, U.S.A. of
CLYDE - GRADE Logging and Hoisting Machinery.

FOR SALE = \$15,000

Imperial Spoke and Rim Plant

Equipment, Machines, Tools,
Furnishings and All Supplies

Dyersburg, Tennessee

THIS PROPERTY INVENTORIES \$27,000

TERMS: CASH . . . \$10,000
NOTES . . . \$ 5,000

Payable \$1,000 Annually

OFFER GOOD UNTIL DECEMBER 25, 1912

ADDRESS QUICK

Durant-Dort Carriage Co., Owners
FLINT, MICHIGAN

CINCINNATI

THE GATEWAY OF THE SOUTH

MOWBRAY & ROBINSON

SPECIALISTS IN

OAK—ASH—POPLAR

ALWAYS IN THE MARKET FOR
ROUND LOTS OR MILL CUTS

OFFICE AND YARDS
SIXTH ST., BELOW HARRIET

CINCINNATI

The Maley, Thompson & Moffett Co.

Veneers, Mahogany and Hardwood Lumber

Largest Stocks

Best Selections

CINCINNATI, OHIO

OHIO VENEER COMPANY

OFFICE AND MILLS:

**2624-2634 Colerain Avenue
CINCINNATI OHIO**

WE OFFER THE FOLLOWING VENEER FOR SALE:

600,000 ft. 1/28" Cut Circassian Walnut Veneer
1,500,000 ft. 1/28" Slice Cut Figured African Mahogany Veneer
100,000 ft. 1/24" Slice Cut Figured African Mahogany Veneer
125,000 ft. 1/20" Sawed Mexican Mahogany Veneer
200,000 ft. 1/20" Sawed Quartered White Oak Veneer
280,000 ft. 1/20" Slice Cut Quartered White Oak Veneer
150,000 ft. 1/28" Slice Cut Quartered White Oak Veneer
350,000 ft. 1/28" Slice Cut Figured Gum Veneer
50,000 ft. 1/28" Slice Cut Quartered Sycamore
600,000 ft. Slice Cut African Mahogany Crotch Veneer
70,000 ft. Cut Bird-Eye Maple Veneer

W. E. HEYSER, President WEAVER HASS, V. President
BENJAMIN BRAMLAGE, Sec'y & Treas.

The W. E. Heyser Lumber Company

MAIN OFFICE & YARDS
Winton Place
Cincinnati, Ohio

BRANCH YARDS AND MILLS
West Virginia, Mississippi, Arkansas & Kentucky

12,000,000 ft. High Shipments made
Grade West Vir- direct from our
ginia and Southern own yards and
Hardwoods in mills in straight or
stock at all times. mixed cars.

SEND US YOUR INQUIRIES

C If you are not a subscriber
to **HARDWOOD REC-
ORD** and have a suspicion that
you would like to see a copy, it
is yours for the asking.

BENNETT & WITTE

JUST A FEW OF OUR SPECIALS

1 car 4/4" No. 1 & Panel Sap Gum, 21" to 25".	2 cars 4/4" Sd. Wrmy. & No. 2 Com. Qrtd. Chestnut.
2 cars 4/4" 1 & 2 Red Gum, 18" to 27".	3 cars 4/4 1 & 2 Poplar.
3 cars 4/4 No. 1 Com. Qrtd. Red Oak.	1 car each 12/4" No. 1 Com. Selects & 1 & 2 Poplar.
2 cars 4/4 1 & 2 Pl. Red Oak, 12" & up.	1 car each 4/4 No. 1 Com. & 1st & 2nds Ash.
1 car 4/4 No. 1 Com. Qrtd. White Oak.	1 car 4/4, 5/4 & 6/4 1 & 2 Ash, 12" & up wide.
1 car 12/4 1 & 2 Pl. White Oak.	1 car 8/4", 10/4, 12/4 & 16/4" 1 & 2 Ash, 12" & up wide.

Main Office
CINCINNATI, OHIO
222 W. 4th Ave.

SOUTHERN OFFICE, MEMPHIS, TENN.
EXPORT OFFICE, NEW ORLEANS, LA.

CINCINNATI

THE GATEWAY OF THE SOUTH

FOR QUICK SHIPMENT

5 cars 4/4" Sap & Sel. Poplar.	5 cars 4/4" No. 1 Com. Plain
5 cars 6/4" No. 1 Common	White Oak.
Poplar.	
4 cars 4/4" 1s & 2s Plain	4 cars 5/4" No. 1 Com. Plain
White Oak.	White Oak.
4 cars 5/4" 1s & 2s Plain	2 cars 6/4" No. 1 Com. Plain
White Oak.	White Oak.
1 car 6/4" 1s & 2s Plain	1 car 8/4" No. 1 Com. Plain
White Oak.	White Oak.

All the above stock Thoroughly Dry, Band Sawn and Equalized

GET OUR PRICES

KENTUCKY LUMBER COMPANY

CINCINNATI, OHIO

L. W. RADINA & CO.

DEALERS IN

POPLAR AND HARDWOODS

CINCINNATI : : OHIO

POPLAR SPECIALISTS

We have always made a distinct specialty of Poplar, Rough and Milled. Have 3,000,000 feet nice, dry stock at Cincinnati now, and some at our mills

CAN WE SERVE YOU?

THE M. B. FARRIN LUMBER CO.
CINCINNATI, OHIO

E. C. Bradley Lumber Co.
705-706 Gerke Building, Cincinnati, Ohio

20,000' 4/4 1's & 2's Cherry. 4 cars 3" No. 1 Common & Better Hard Maple.
15,000' 4" No. 1 Common & Better Hard Maple. 6 cars 4/4 Log Run Hard Maple.
6 cars 4/4 No. 2 Common Hard Maple.

ABOVE IS ALL WEST VIRGINIA STOCK.

2 cars 4/4 1's & 2's Yel. Poplar. 1 car 3" No. 1 Common & Better Yellow Poplar.
2,000' 4" No. 1 Common & Better Yellow Poplar. 2 cars 4/4 Log Run Beech.
1 car 8/4 No. 2 Com. Buckeye. 10,000' 4/4 Log Run Cherry.
2,500' 5/4 No. 1 Common & Better Cherry.

All of the above is band sawed, good widths and lengths, and we can make prompt shipment

WE WANT TO BUY

1", 1 1/4", 1 1/2" 1s & 2s AND NO. 1 COMMON SAP GUM
1", 1 1/2" & 2" 1s & 2s AND NO. 1 COMMON RED GUM
1" NO. 1 COMMON TUPELO.

SUBMIT US YOUR STOCK SHEETS
WITH BEST CASH PRICES

DUHLMEIER BROS.
CINCINNATI, OHIO

500 Copies Sold Within a Week After Prospectus Was Issued

Hardwood Record announces the issue on January 1, 1913, of an Authoritative Commercial and Scientific Book

American Forest Trees

By Henry H. Gibson, Editor Hardwood Record
Edited by Hu Maxwell, Wood Utilization Expert

The Work Involves:

First: A botanical description of the more than 300 species of American forest tree growth.

Second: A physical description of the wood of these species.

Third: A recital of the chief uses of all important American woods, together with suggestions of advantageously broadening their uses.

Fourth: Complete information concerning the range of growth of all varieties.

Fifth: Related trees are logically grouped according to families and spe-

cies; important species covered in substantial detail, and brief mention of the woods of minor importance.

Sixth: Scientific name of each tree is recited, as well as the various common names by which it is recognized in different parts of its range of growth.

Seventh: The properties of the various woods are carefully analyzed, particularly weight, hardness, stiffness, strength, elasticity, toughness, color, figure, and seasoning and lasting properties.

¶ The book will contain between 650 and 750 pages, will be printed on the best quality of enameled paper, and handsomely bound in half leather, dark green roan back and corners, with basket cloth sides, silk head-bands, gold stamping on the back, and gilt top.

¶ The work will be illustrated with more than 100 full-page pictures on plate paper in sepia, outlined in orange, from photographs, covering all the chief commercial varieties of virgin forest timber growing in the United States; and also with numerous engravings, from drawings and photographs, showing leaf and flower forms, etc.

¶ The price of the work is \$6.00, delivered by express or mail, and is sold only on subscription.

¶ An order blank, and a prospectus, showing the character of the paper, size of page and style of printing will be forwarded on application.

Address Book Department, HARDWOOD RECORD

537 South Dearborn Street

Chicago, Illinois

ORDERS SHOULD BE PLACED AT ONCE

THE EAST

BOSTON

NEW YORK

PHILADELPHIA

WM. WHITMER & SONS

INCORPORATED

Manufacturers and Wholesale-
sals of All Kinds of"If Anybody Can,
We Can"

HARDWOODS

West Virginia Spruce and Hemlock
Long and Short Leaf Pine Virginia Framing

Franklin Bank Bldg.

PHILADELPHIA

Willson Bros. Lumber Co.

MANUFACTURERS

WEST VIRGINIA HARDWOODS

Oliver Building

PITTSBURG, PA.

PALMER & PARKER CO.

TEAK

ENGLISH OAK

CIRCISSIAN WALNUT

MAHOGANY

VENEERS

EBONY

DOMESTIC

HARDWOODS

103 Medford Street, Charlestown Dist.
BOSTON, MASS.

BEECHER & BARR

OAK

CHESTNUT

POPLAR

WHITE PINE, YELLOW PINE AND HEMLOCK
INTERIOR TRIM. HARDWOOD FLOORING.

442 LAND TITLE BLDG.

PHILADELPHIA, PA.

WISTAR, UNDERHILL & NIXON

REAL ESTATE TRUST BUILDING, PHILADELPHIA, PA.

QUARTERED WHITE OAK

NICE FLAKY STUFF

WM. E. LITCHFIELD

MASON BUILDING, BOSTON, MASS.

Specialist in Hardwoods

Manufacturers are requested to supply lists of stock for sale

We Know How to fill your orders for all kinds of HARD-
WOODS, WHITE PINE, YELLOW PINE,
SPRUCE, HEMLOCK, CYPRESS, HARDWOOD FLOORING.
Give us a trial.THOMAS E. COALE LUMBER COMPANY
FRANKLIN BANK BUILDING, PHILADELPHIA, PA.

JONES HARDWOOD COMPANY

WHOLESALE DEALERS IN

HARDWOODS—Poplar and Gum

33 Broad Street,

BOSTON, MASS.

PROMPT SHIPMENT

1 car 4/4 No. 1 Com. and Saps Poplar.
2 cars 4/4 No. 2 Com. & Better Hard Maple.
2 cars 8/4 Log Run M. C. O. Soft White Pine.
2 cars 5/4 Log Run M. C. O. Basswood.

DANIEL B. CURLL, Real Estate Trust Bldg., PHILADELPHIA

Saw Mills Designed and Built

Plans and specifications prepared. Construction supervised.
First class heavy millwright work. Entire plants surveyed. Ma-
chinery for complete mills. Fire loss adjustments. Practical
sawmill engineer. Can save you money. Highest testimonials.

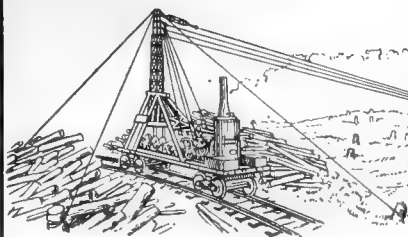
C. M. STEINMETZ,

P. O. Box 83, Washington, D. C.

The CHEAPEST HARDWOOD LOGGING

IS DONE WITH

LIDGERWOOD CABLEWAY SKIDDERS

LIDGERWOOD MFG. CO.
96 Liberty Street, New YorkBranch Offices
CHICAGO, SEATTLE
Agencies
NEW ORLEANS—WOODWARD, WIGHT & CO. LTD.
CANADA—ALLIS CHALMERS BULLOCK LTD.
MONTREAL VANCOUVER

THE EAST

LEADING MANUFACTURERS AND JOBBERS

<p>ASH 4/4, 5/4, 6/4, 8/4, 10/4, 12/4 and 14/4.</p> <hr/> <p>MAPLE 4/4, 5/4, 6/4, 8/4, 10/4, 12/4 and 16/4.</p> <hr/> <p>YELLOW POPLAR All grades and thicknesses.</p>	<p>AMERICAN LUMBER & MFG. COMPANY Manufacturers and Wholesalers PITTSBURGH, PA.</p> <hr/> <p>HARDWOOD White and Yellow Pine</p> <hr/> <p>We make a specialty of thick White Ash, Hard Maple and White Oak. Railroad Car and Construction Oak timbers, long lengths and special sizes. Write for prices before heavy call for Spring requirements.</p>	<p>POPLAR 4/4 Bay Poplar (Tupelo 1st and 2nds.)</p> <hr/> <p>OAK White and Red, Quartered and plain sawed, all grades and thicknesses.</p> <hr/> <p>CHESTNUT All grades and thicknesses.</p> <hr/> <p>SPRUCE All grades and thicknesses.</p>
---	--	--

HARD MAPLE

When the quality of being hard is required in Maple, Vermont or Adirondack stock should be specified. Maple will not grow harder for us than other people, but it certainly does grow harder in this section of the country than elsewhere.

WE CAN MAKE PROMPT SHIPMENTS.

GEO. WEBSTER LUMBER CO.

New York Office
25 West 42nd St.

21 Besse Place, Springfield, Mass.

CHARLES HOLYOKE
141 MILK STREET, BOSTON, MASS.
HARDWOODS

H. D. WIGGIN 89 STATE STREET
BOSTON, MASS.
MANUFACTURER HARDWOOD LUMBER
Circular-sawed Poplar, Oak, Chestnut, Basswood, Maple
Mill at Stone Coal Junction, West Virginia

WHITE OAK } 6x6 to 12x12
BILL TIMBERS } 10 to 20 ft.
ALSO BRIDGE PLANK
J. S. KENT COMPANY PHILADELPHIA

89% of HARDWOOD RECORD subscribers
are owners of steam plants. Eighty-
nine per cent are, therefore, buyers of
wood-working machinery. There is lit-
tle percentage of waste circulation in
HARDWOOD RECORD for machinery advertisers.

D. B. MacLaren Lumber Co.
HARDWOOD LUMBER
Evansville, Ind.

5 cars 4/4 No. 1 common Quartered White Oak
4 cars 4/4 No. 1 common Plain Red Oak
2 cars 4/4 No. 2 common Plain Red Oak
1 car 4/4 No. 1 common Poplar
1 car 4/4 Nos. 1 and 2 Red Gum

R.E. Wood Lumber Company

- ☞ Manufacturers of Yellow Poplar, Oak, Chestnut, Hemlock and White Pine.
- ☞ We own our own stumpage and operate our own mills.
- ☞ Correspondence solicited and inquiries promptly answered.

GENERAL OFFICES:
CONTINENTAL BUILDING.

Baltimore, Maryland

YOU pay a *little* more for our hardwood lumber than you do for many others, but it's worth *much* more.

With our modern and first-class equipment and expert operatives, we couldn't make bad lumber if we tried to, because the *quality* and *size* of our virgin tough mountain white ash, red birch, yellow poplar, buckeye, maple, red oak, cherry and basswood, averaging less than three logs to the thousand, and 95 per cent sixteen feet, is the best type of hardwood timber growth in the United States, and shows a larger percentage of *firsts*.

If you are a discriminating buyer let's get acquainted.

LITTLE RIVER LUMBER COMPANY,

Townsend, Tenn.

Dry Poplar
for
Immediate
Shipment

2 cars 4/4 Fas.
2 " 4/4 Saps, Selects.
3 " 4/4 No. 1 Common.
3 " 6/4 No. 2 Common.
1 " 8/4 Fas.
2 " 8/4 Saps, Selects.
5 " 8/4 No. 1 Common.
4 " 8/4 No. 2 Common.
2 " 10/4 No. 1 Common.

FAUST BROTHERS LUMBER COMPANY

Sales Office
1319 Fisher Bldg., CHICAGO

Main Office
PADUCAH, KENTUCKY

FREIGHT OVERCHARGES

WE SPECIALIZE ON LUMBER TRAFFIC
We represent nearly every member of The Mississippi Pine Association

Our overcharge claims for one company, \$6,000.00

Let us analyze your freight accounts
Collect past and prevent future overcharges
Best references from Lumbermen from
Canada to Mexico

COST BASED ON RESULTS

Write for particulars and terms.

The American Freight Audit & Storage Co.

Incorporated
Rooms 55-8, 39 West Adams St.

Chicago

**FIRE
INSURANCE**

Lumber Underwriters

66 BROADWAY
NEW YORK

R. F. PERRY, Manager.

Panel and No. 1 Poplar

5 cars 4/4" 18/23"

5 cars 4/4" 24" and up

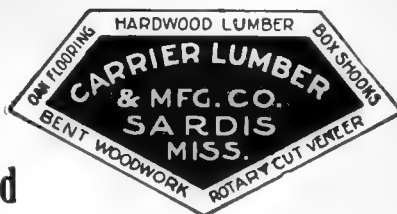
Let Us Have Your Inquiries

RUSSE & BURGESS, Inc.

Memphis, Tennessee

OAK FLOORING

**Kiln-
Dried
Polished**



**Hollow
Backed
and
Bundled**

89%

of **HARDWOOD RECORD** subscribers are owners of steam plants. Eighty-nine per cent are, therefore, buyers of wood-working machinery. There is little percentage of waste circulation in **HARDWOOD RECORD** for machinery advertisers.



Hardwood Record



Published in the Interest of the American Hardwood Forests, the Products thereof, and Logging, Saw Mill and Wood-working Machinery, on the 10th and 25th of each Month, by

THE HARDWOOD COMPANY

Henry H. Gibson, President
Burdie Anderson, Sec'y and Treas.

Entire Seventh Floor Ellsworth Building
537 So. Dearborn Street, CHICAGO

Vol. XXXV

CHICAGO, DECEMBER 10, 1912

No. 4



Review and Outlook



General Market Conditions

The usual holiday slackening in business is but slightly perceptible in the various hardwood centers throughout the country although in a few instances reports come in that this condition is showing itself. Outside of this feature, however, there is practically no alteration in the hardwood situation during the last two weeks. Reports state that there is some little easing up in the car situation except at such southern points as are materially affected by cotton movements. It is expected that the crest of the demand for cars by planters will have been passed by the first of the year, after which time lumbermen will have less difficulty in obtaining rolling stock. Throughout the rest of the hardwood territory of the United States, while cars are difficult to get, there is but little actual hardship experienced except perhaps in some sections in Michigan where the sugar beet industry has grown to such enormous proportions that the movement of the crop at this time seriously strains the facilities of roads in that section. It is estimated that the sugar beet industry in Saginaw valley exceeds by far the proportions of the old white pine business in that territory when it was at its greatest.

Unusually fair weather has distinctly favored the lumber industry, particularly the sawmill end. Report, however, comes from the Mississippi Delta country of extremely heavy rains which have prevailed there for several days. Continuance of this condition will undoubtedly seriously affect the operations of the mills in the delta territory. Such condition is to be regretted as the hardwood mills of the country now have all they can do to fill in the present scarcity of hardwood stock.

A month ago some members of the trade were predicting that before the first of the year there would be considerable accumulation in some sections, of dry hardwood, but there seems to be absolutely no tendency up to date to check the movement which in some instances has compelled the shipment of stock green from the saw. In fact, this is not at all an uncommon occurrence at present.

Export conditions at New Orleans are not entirely satisfactory, the month of November showing a decrease over October. Shipments during November, however, are greater than during November, 1911. It is anticipated that the movement to foreign ports will be light during the remainder of the year owing to the ocean freight rate

situation. The report from Baltimore, however, is more favorable. Export conditions have been excellent, shipping conditions being considerably improved. Cargoes of excessive proportions have been sent from Baltimore but an unusually strong market on the other side has taken all that has been offered without any trace of breaking or surplus. Buyers in fact are actually meeting the exporters' prices which have gone up owing to increased rates on ocean tonnage.

The usual relative position is being maintained in the various woods, with a continued strengthening on quartered oak. The mahogany situation continues to be strong with high prices and scarcity of stock. Wide poplar, while still not strong, is being taken up in a little better shape than formerly. The automobile people seem to be getting back into the poplar market satisfactorily.

Undoubtedly the modern style of office building construction calling for polished marble corridors in place of wood trim has had some little effect on the hardwood demand. However, this has been offset by increased popularity of hardwood interior work in dwellings. A seasonable condition of trade maintains in the various consuming lines. In the East active competition has been a serious factor in determining sales methods on various lines of wood manufactures. As a result price competition has made itself felt, which in turn has created more or less of an indisposition on the part of buyers to tie up any great sums in hardwood stock. This, however, is not a serious condition but purely local and one which undoubtedly will not prevail for any length of time.

Reports emanating from different hardwood sources show a decidedly optimistic feeling regarding winter and coming spring business. There should be no break in the situation for a good many months to come.

A Regrettable Occurrence

It cannot be denied that the Forest Service has vast possibilities, and that it has actually accomplished a world of good both to the country at large and to the lumber trade. Occasionally, however, its methods are open to criticism. One of the latest publications emanating from the Forest Service at Washington is particularly to be regretted by the lumber trade. For two years the Service has been working on the compilation of a bulletin reviewing the last thirty

SUBSCRIPTION TERMS: In the United States and its possessions, and Canada, \$2.00 the year; in foreign countries, \$1.00 extra postage.

In conformity with the rules of the postoffice department, subscriptions are payable in advance and in default of written orders to the contrary, are continued at our option.

Instructions for renewal, discontinuance, or change of address, should be sent one week before the date they are to go into effect. Both old and new addresses must be given.

Both display and classified advertising rates furnished upon application.

Advertising copy must be received five days in advance of publication dates.

Telephones—Harrison 8086-8087-8088.

Henry H. Gibson, Editor; Hu Maxwell and Edwin W. Meeker, Associate Editors.

Entered as second-class matter May 26, 1902, at the postoffice at Chicago, Ill., under postoffice No. 1879.

years' developments in the lumber trade, giving market conditions prevailing at different periods. The bulletin itself undoubtedly will be of interest and value in a comparative way, and if the Service had not decided to make an announcement of the pending publication of this bulletin, things would have been all right. But coming from that source, under date of November 25, is a detailed notice containing excerpts from the bulletin but printing them in such a way that the public is given to believe the conditions as quoted apply to present markets. There is absolutely nothing to correct or to prevent such a false impression. The notice has been sent out to the Associated Press and has already been printed pretty widely.

The bulletin says that production has outrun consumption until a condition of over-supply has been reached which has prevailed for four years. It further says that there exists an excess capacity of production amounting in some of the timber states to one hundred per cent; and further goes on to tell of the increase of substitutes for wood, stating that they have brought the demand for lumber almost to a standstill and promise to still further decrease demand in the future. The writer of this particular passage says that prices for middle and low-grade lumber have been practically at a standstill since 1907 and cannot advance to any extent without opening the door still wider to substitutes. It is certainly to be regretted that this sentence alone was published, covering conditions of several years ago.

It is to be hoped that the bulletin itself from which can be gleaned information which will correct false impression created by the announcement, will be given as wide publicity as the announcement and that the service will do its part toward correcting the evil that may have resulted.

Taft Pleads for Export Trade

President Taft in a notable message to Congress on December 3 clearly established his position regarding the development of this country in its industrial relations with foreign nations. Some of Mr. Taft's most marked achievements have been along the lines of establishing relations with foreign countries, which will result in an unchecked growth of this nation's export business. The successful culmination of his efforts in this line will undoubtedly be more fully appreciated in after years and will certainly stand out as one of the most notable achievements of any of the presidents. The President's message in discussing many questions lays particular stress upon the wisdom of the policy which has gained the title of "dollar diplomacy." Our distinguished President has advocated the possibility of consummating amicable relations between civilized nations by means of establishing firm commercial relations rather than through the medium of bullets.

Under the present administration marked steps in advance have been taken in view of establishing more firmly American footing in foreign commerce, but the message urges the necessity of presenting a solid front in all questions involving the expansion of business, contending that otherwise many markets will be usurped by foreign commercial interests which naturally belong to the American trade.

One of the features of the administration tending to place our foreign commerce on a higher standard has been the raising of the standard of the foreign corps. By putting this branch of the government entirely under the merit system the highest character of efficiency and development in foreign commerce has been effected.

The plea contained in the message, which undoubtedly will meet with the unbiased approval of every true citizen, is the appeal to Congress to raise the great foreign policy above the mere question of partisanship. This is involved in his plea to stand firmly together in all commercial relations with foreign powers. If this ideal condition can be accomplished, and if the government and commercial business interests through the medium of the newly-organized Chamber of Commerce of the United States can work together, the possibility of future development in our now already important foreign relations is unlimited.

It is sincerely to be hoped that this policy will receive due consideration from the coming administration, and that the principles involved will be carried out to the interest of the country at large.

Excessive Prices and Poor Business

Lumbermen's attention has been called continually to the folly of attempting to maintain an excessively high level of prices on hardwoods. Experience has always proven that when such stock attains value very materially greater than the market has been used to paying for it without such rise being so gradual as to be scarcely perceptible, a reaction will result. This is due to the fact that buyers are either unwilling to buy any lumber on this basis and content themselves with playing a waiting game and not making any purchases, or else they seek out some substitute. It is a matter of history that the dull condition in the poplar market which prevailed for some little time recently was directly due to high prices on high-grade material. It is a further matter of common knowledge that the unusual prices which quartered oak was bringing three or four years ago resulted in buyers giving up the purchase of this material for the time being. In fact, the difference between the cost of quartered oak and mahogany at the time of greatest value for the former wood was so small as to turn the buyer's attention to mahogany. Mahogany on the other hand now seems to be following the same course as quartered oak. It is scarce and high, and with a knowledge of this fact comes the generally increased firmness in the quartered oak market.

The latest example, however, of the buyer's willingness to substitute when prices are in his judgment excessive is seen in a report of the German market emanating from a Hamburg firm of repute. This company makes the statement that cottonwood has reached such a high level of price that its use is actually prevented to a large extent. It further asserts that the local and cheap African woods can be purchased to much better advantage to the buyer. This condition, of course, is due in a large measure to the excessive rates on ocean freightage, but another contributing factor undoubtedly is the high prices asked by exporters and shippers generally for this stock. The loss of a foreign market for any particular item of lumber is more serious than is a shipping market in this country. This is naturally so because of the fact that the buyer and seller are more intimately acquainted here than are the exporter and foreign importer. The source of supply and the market being in much closer proximity, of course, than in foreign trade makes the matter of adjustment of various shifting conditions much more propitious in this country than in the export trade. It is to be hoped that this condition as suggested by the German market for cottonwood will not make itself manifest in the sales of other woods.

Reimbursed for Damages from Car Shortage

As reported by a correspondent the coal industry has achieved a notable victory in a suit instituted in Kentucky by a local coal mine against the Illinois Central Railroad for damages on account of the failure of this road to supply sufficient cars to take care of the company's shipments. The reasonableness of damage claims on this account has been advocated by shippers for some time, but in few instances has the possibility of winning a decision seemed evident. As a result shippers have been pretty generally discouraged from making any attempt to recover damages.

The point on which the case was contended was that while the road had adequate facilities to move coal shipments during normal periods, excessive shipments in the late fall and winter were entirely too great for the rolling stock. Attorneys for the defendant maintain that the question should be considered on the basis of the normal demand for cars, but the court ruled that inasmuch as the great demand for cars during the fall and winter period is regular and is to be expected every year by the roads, they must necessarily govern their supply of rolling stock according to the demand at that time.

The question came down to one of public interest, namely, that while the roads can carry on business and show a profit without carrying coal, it is absolutely impossible for the coal companies to continue in existence, and it further would work a decided hardship on consumers both industrial and private if the coal mines did not have suitable transportation facilities.

While the situation in the lumber business is not exactly analogous, the lumber trade would undoubtedly have a case if it protested against

the ignoring of its interests by the railroads as under present conditions. The lumber trade could very justly base its plea upon the question of public interest as instanced by the suit just going into effect in which a Memphis concern is seeking to prevent excessive rates from the Memphis territory. The point in this case is that such excessive rates prohibit the movement of lumber, which would be used for building purposes, and further absolutely prevent the opening up of these territories for agricultural purposes, inasmuch as they prevent a clearing of the land of standing timber. Concentrated interest is all that is necessary to carry conviction based on just claims. This sentiment of unity is constantly making itself more strongly manifest in connection with the lumber business, and it is to be hoped that it will not be long before the entire lumber trade can put up a solid front on any question having any direct bearing on the interest of that business.

Why Is a Trade Paper?

It is always gratifying to have sufficient confidence in one's own good work and in one's relations toward mankind to be able to sit quietly and undisturbedly by while the next door neighbors on either side are throwing verbal mud across the back fences. A situation of this kind cannot fail to give one a warm glow of satisfaction in the belief that his efforts at least are appreciated to the extent that he is not considered a fit subject for vituperation and sarcastic comment of various types. Instance, —an undignified and purposeless wrangle which is being carried on by certain of our esteemed contemporaries. The disputes in question carrying no direct reference to any question which should have any bearing upon the good or ill of the lumber trade, naturally cause wonder at the evident conception in the minds of these contemporaries of the duty of the trade journal to the trade it represents. It has always seemed that the reason for the existence of a trade paper is that through it the trade is furnished with an efficient and accurate spokesman, an organ which will act as a sort of mirror for the ideas and opinions of the trade and will put its best efforts into an exposition of such things as would react to the benefit of the trade it represents. Seemingly, however, this idea is rather old-fashioned. There is an evident opinion among certain prominent journalists connected with lumber journalism that the field of usefulness of a trade paper, while incidentally in the interests of the trade it is sponsor for, is more directly to afford a means by which personal quarrels and petty jealousies can be exploited for the benefit of no one but the writers concerned. What possible benefit to the lumber trade can come from criticism, either straightforward or sarcastic, of the methods of a competitor? It has always been our belief that a trade paper edited and published in such a manner that it would stand absolutely on its own merits, winning subscribers, readers and business because of the fact that its attractiveness and usefulness made it indispensable, would need to pay no attention to vituperant outpourings of any other medium of a similar nature. Every red-blooded man likes a good scrap, but nobody who has attained his majority has any particular fondness for tongue-lashing and hairpulling tactics when employed by grown men. If the lumber trade feels that the discussions referred to have any particular bearing on the lumber business, there is nothing further to say, but it does not seem that it will view it in that light.

Broader Than Dollars and Cents

The public at large is apt to take a rather narrow view of the broad question confronting the railways involving on one hand advances in freight rates and on the other hand advance in the cost of maintenance and operation. Notwithstanding extremely favorable reports on gross and net earnings coming from the roads since trade situation has been manifestly improving, the common carriers must necessarily look at the question not entirely with a view of meeting immediate necessity, but rather considering the situation as it will have a direct bearing in the future.

The absolute power enjoyed by the unions of railway employees is undoubtedly not a matter of public knowledge, at least the average citizen has probably not taken the time to reason the thing out to an ultimate conclusion. Does he realize that the entire industrial and business structure of the country and also the social structure embodying the sustenance of the family, its physical comfort as affected by coal supply, is absolutely controlled by conditions existing with our means of transportation,—namely, the railroads? Does he realize further that the organizations of railway employees are the most powerful and efficient of any labor organization in the world and that in the event of discontinuance of employment by reason of strike or other cause on the part of the organization, it would be next

to impossible to fill their places with any degree whatever of satisfaction? Any general strike on the part of railway employees means absolute discontinuance of business and industrial effort. The tremendous power of the railroad employees' unions therefore can be readily seen. What they will do with this power depends entirely upon the personnel of those organizations. They have, if they wish, power to demand such increases in wages as will ultimately narrow the margin of profit to the railways to the vanishing point. It is not reasonable to suppose they would employ these narrow-minded methods, but nevertheless the menace is constantly before the officials of the big systems of the country.

It is possible that this feeling, which in some quarters very likely is one of unconscious apprehension, in a degree retards investment in railway property,

which in turn results in insufficient investment to effect improvements and expansion and in the same line ultimately retards development of the country.

An article in this issue of **HARDWOOD RECORD** suggests the possible means for governing advances in freight rates on an amicable and equitable basis. Would it not be a feasible proposition to employ the same kind of a scheme to adjust the relations between railway employers and employees? The personnel of the unions is undoubtedly of high character. The men are all citizens of good standing. If the baleful influence of certain organizations ostensibly in the interests of the labor unions but really of socialistic and anarchistic nature can be eliminated, it is reasonable to suppose that the time will come when all questions involving wages of railway employees will be settled not by strike or argument, but through some unbiased meeting which will absolutely guarantee equitable adjustment.

It is inconceivable that any body of intelligent men such as is found in the railroads' employ would willingly take an arbitrary stand if they could be brought to a constant realization of the grave possibility of such action checking the advancement of the country.

UNSOLICITED TESTIMONIAL

C. S. Brown

**Boat and Dock Timbers, Hardwood and
Yellow Pine Lumber,
Timbers, Ties and Piling**

Huntington, W. Va., Nov. 27, 1912.

Hardwood Record,
Chicago, Ill.
Dear Sirs:—

I have received such satisfactory results from your bulletin service that I wish to express to you my sincere thanks for bringing the proposition to my notice.

From the firms I selected from your list, I received very courteous replies to at least seventy-five per cent of my requests for an opportunity to quote them and added out of this list several new customers.

On the whole I think of no service that is more effective to obtain the desired result than this.

Yours very truly,

C. S. BROWN.

Poor Matching versus Profits

An article appearing in this cover treats somewhat at length of the folly as shown in some manufacturing plants of giving too little attention to the question of matching lumber so as to turn out an article which embodies the maximum of beauty contained in the wood going into its manufacture. The question is not in any way an esthetic one, but merely involves a question of dollars and cents. It surely has a bearing on the ultimate profit balance of any manufacturing concern turning out wood goods. It is not reasonable to suppose that a dealer in furniture or the ultimate consumer buying in single pieces will consider an article showing poor matching where strikingly different color and grain are shown in direct contact in different pieces of wood in the same article as of equal value to an article which distinctly shows great care in matching. It is hard to conceive of any real reason for not giving close attention to this feature of manufacture. It may be argued that the additional cost of selecting stock is prohibited. The human element undoubtedly also comes in strongly. It is of course difficult to train a mere tradesman to the finer points of proper utilization, but nevertheless efforts along these lines will react to considerable advantage. There has been some little complaint among the woodworking factory trade that keen competition has inaugurated a condition of competition on price. It would seem that the concern paying particular attention to the question of satisfying as far as possible the esthetic taste of the purchaser of his goods is going to have a big bulge on the man who simply grinds out work, taking the lumber as it comes from the kiln. At least the question is one which might well be considered seriously.

Imports and Exports for October

A summary of commerce and finance showing the imports and exports for October, 1912, compiled by the Department of Commerce and Labor, shows a healthy increase in the total export of woods and the manufactures of woods over October, 1911. The total for October of this year was \$8,463,490 and for October a year ago \$7,823,634. The total export value of logs and other round timber decreased during this period from \$216,590 to \$154,296. This can undoubtedly be attributed to a great degree to the serious condition of the export ocean freight situation.

The total value of hewn and saved timber fell from \$757,338 to \$616,076. On the other hand the total export of lumber in boards, planks, deals, joists, etc., increased from \$4,342,104 to \$4,398,964. Of the remaining export of manufactured wood goods decided increases were shown in shingles, shooks, staves, headings, sash, doors and blinds, furniture, hogsheds and barrels, interior trim and other house furnishings, woodenware, wood pulp and several other lines of smaller manufacture. The increase in total export was noted mainly in these items.

The import value of wood goods manufactured and unmanufactured increased from \$5,682,800 in October of 1911 to \$6,208,570 in October, 1912. There was an increase in the import value of all unmanufactured round timber, mahogany of course being the most important of the lumber items. The value of mahogany brought into this country in October, 1912, was \$550,248. The value of pulp woods imported increased from \$524,091 to \$565,661. Manufactured lumber of various kinds to the value of \$2,141,401 was imported in October, 1912, as against a total import value of \$1,790,663 for October, 1911.

The import value of lath increased materially, while the import value of shingles fell off considerably. The import of foreign furniture remained practically the same. The total value of wood pulp imported increased from \$1,306,139 to \$1,502,190.

Sugaring the Grade

An enterprising advertiser in HARDWOOD RECORD uses this sentence among others in his advertising: "When you specify a certain grade of lumber, you get just that grade." It is a safe guess that most people interpret this to mean that there is no stuffing or salting of the grade with a percentage of something lower, in the hope that it will get by, and with the feeling that if it does not, the shipper

will at least get its grade value. Sticking to a grade, however, means more than that. It means, or should mean, including neither that which is better nor that which is worse. It means freedom from the reverse of salting grades (sugaring the grade). It is not generally considered objectionable for the millman to ship stock that is above grade if he wants to and is willing to stand for it, but there are objections, and trade troubles which result from this practice as well as from salting, though perhaps they are not so frequent nor so acute as the former case.

A country customer of a lumberman recently called him over long distance and registered a kick on a carload of lumber. The customer admitted that the lumber would pass inspection and make the grade the order called for, but said it was so much below the grade he had been in the habit of getting that he wanted the lumberman to make a reduction of \$2.00 a thousand on it. This led to a lot of correspondence between the lumberman and the mill shipping the lumber. The mill had built up a reputation for shipping out stock above grade, and for this reason was often able to get preference on orders at equal prices with other mills. When this claim of the customer reached the main office in another city, the owners objected, and said that if the mill had been shipping stock that was above grade it was without their knowledge and that it would have to stop. The upshot of it all was that the lumberman had a dissatisfied customer, and the inspection department at the mill got a jacking up, and the mill manager probably felt that his prestige on orders was gone.

From a monetary standpoint that millman would have been as well justified in cutting his regular price as in shipping lumber that was above grade, but he perhaps persuaded himself that it looked better morally to sugar his stock, and that technically he was maintaining prices. In reality he was not, and the morals of the thing are subject to fully as severe criticism as cutting prices. Then, entirely aside from the question of right and wrong to other members of the trade, he was spoiling his customers, detracting from the value and usefulness of specific grades, and letting down the bars to wrangles about quality which would be without any reliable guide for adjustment.

Sugaring a grade may not be as gross a fault as salting it, but neither is right, and what is not right is wrong. If you are selling by grades, stick to them; you needn't strip everything down to line boards that will just barely make the grade; neither should you make the grade markedly better than the specifications call for. It is the specific grades that are the more satisfactory in the long run, and it is sticking to the grades faithfully that helps make them worth more in your business as well as to the trade in general.

Dimension Stock in Handle Making

Some broom handle manufacturers are under the impression that they can make handles only from logs or lumber, but in the case of the handle man who does not saw his own timber but buys it cut into lumber, it is very convenient to buy it in boards cut two inches longer than the finished handles, or in blanks ripped to size. The trouble always has been that the lumberman furnishing this stock will not cut it out as it should be done. A broom handle square must be large enough to allow for plenty of stock for turning, and many millmen, if ordered to rip stock one-and-one-eighth inches square, will try to skimp that measure a sixteenth of an inch or so. This practice will practically spoil the squares for the purpose that the handle man desires to use them.

It is the practice of some mills to rip out large piles of blanks in warm weather from green stock, and let them lay in bulk so long that rot sets in. Consequently, when the handle man puts them on a lathe he finds that a lot of them are worthless to him.

It would seem that it would work to the advantage of the lumber manufacturer to look to this phase of lumber consumption with more care, because good blanks and short boards for broom handles can be made from the edgings and butts, and also from the short lengths which would not saw into a good grade of lumber. It would be well for the sawmill man to look this matter up as there are hundreds of handle factories which are willing to buy this class of stock.



Pert, Pertinent and Impertinent



The Forest Fires

Is this the Forest Primal?—that redolent, hal-
lowed cathedral

Lifted by Nature to God, the silence and joy of
His creatures.

Health-giving, tranquil and strong, the source
of beneficent waters.

Woofing the quickening rains, guarding the boun-
tiful wheat-lands?

This was the Forest Primal;—this roaring,
devouring furnace

Billowed and sheeted with flame, a pitiless, rag-
ing inferno.

See! how the sentinel pines go down, while the
red-hearted cyclone

Greedily sweeps on the settlements, whirling in
panic before it

Caribou, timber-wolves, deer, snorting and plung-
ing and bounding

Mingled with cattle and men, poured through
the streets, where the houses

Melt in the fury!—And now, nothing remains
but the timbers

Desolate, blackened and charred, heaped over
smoldering bodies.

There let the fire-weed grow, dropping memorial
blossoms.

Only a camp-fire brand,—only a spark from an
engine,

One of the myriads blown daily and nightly at
random—

Such was the procreant seed—Come, let us
thresh out the harvest.

—Arthur Gordonstoun.

In the Carpenter Shop

"Life's a hard grind," said the emery wheel.

"It's a perfect bore," returned the auger.

"It means nothing but hard knocks for me,"
sighed the nail.

"You haven't as much to go through as I
have," put in the saw.

"I can barely scrape along," complained the
plane.

"And I am constantly being set upon,"
added the bench.

"Let's strike," said the hammer.

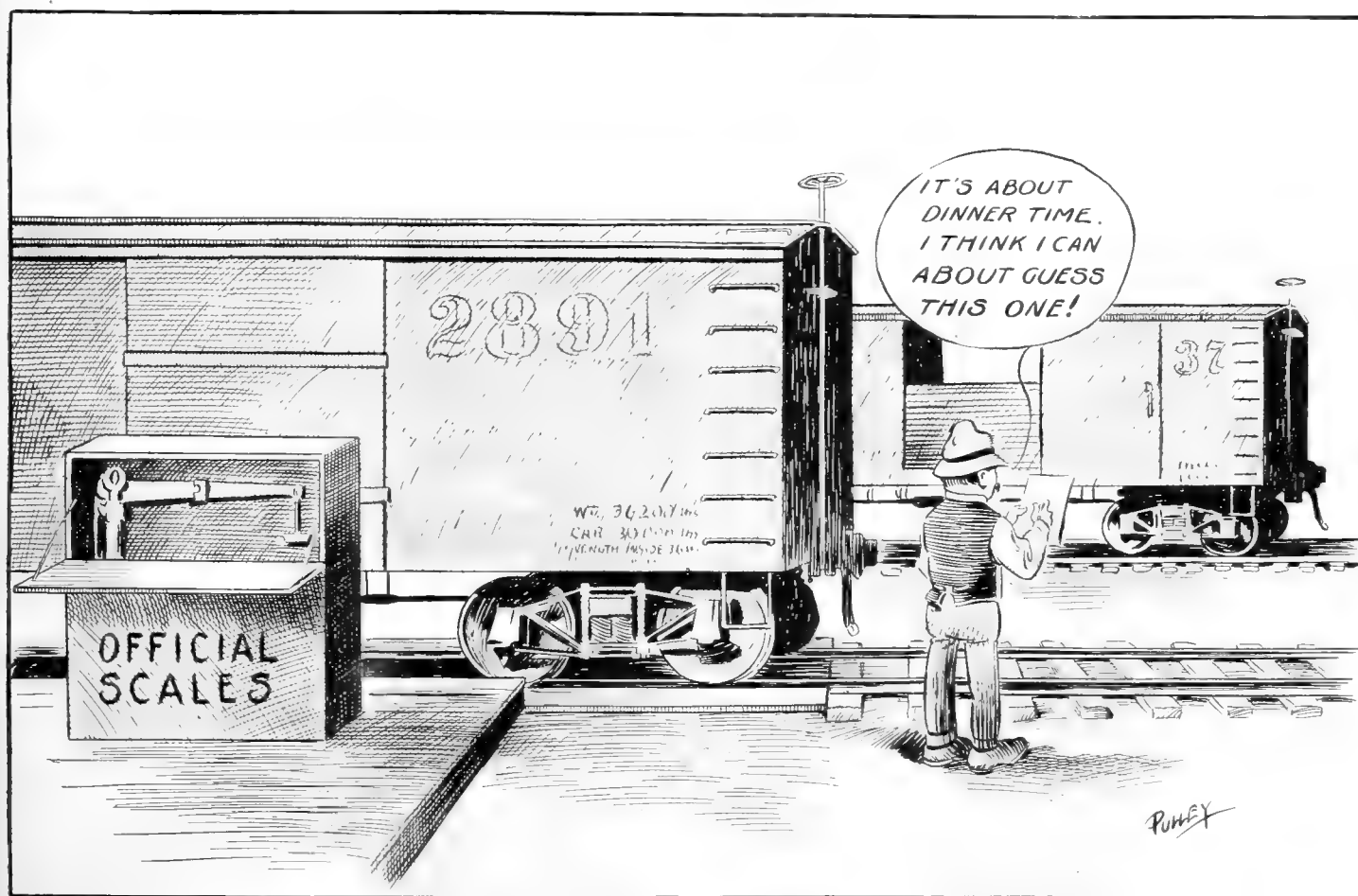
"Cut it out," cried the chisel, "here comes
the boss."

And all was silence.

—Sassaparilla.

But a practical joke isn't funny when the
reaction sets in.

DID IT EVER OCCUR TO YOU?



From the testimony brought out at the recent weight hearings in Boston, it would seem that this is not an uncommon method of "official" weighing.

Generosity

A large, husky negro and a small Frenchman were sawing a large piece of timber for the Boston subway with a heavy crosscut saw, each in turn pulling it back and forth. A pugilistic Irishman stopped to watch the operation. After a few moments he strolled up to the negro and dealt him a blow, saying:

"Give the saw to the little fellow if he wants it."—*Harper's*.

Art Is Short

Artist—"Only \$1.50! Why, the frame cost three times that!"

The Broker—"Vell, dot is all right, my frendt. Ve only loans on der vrame."—*Puck*.

Absent-Minded

Waiter—"Do you mind if I put your bag out of the way, sir? The people coming in are falling over it."

Diner—"You leave it where it is. If nobody falls over it I shall forget it's there."—*Fliegende Blätter*.

The Reason

Benevolent Individual—"Yes, sir: when a man makes a little extra money his first duty is to give his wife a present of a handsome suit."

Ordinary Individual—"You are a philosopher, I presume?"

"No; I am a ladies' tailor."

Premeditated Bliss

"If by any chance I have to stay late at the office, I'll send you a note, dearie," he thoughtfully said as he left in the morning.

"Don't worry, dear," she replied; "I've already found it in your coat pocket!"—*Exchange*.

Military

"Vat makes der corn stalk so?"

"Dot is because its family is all composed of kernels."

Heine—"Und how dit you say you becamed such a wonderfud orator?"

Louey—"Mein poy, I began by addressing envelopes."

American Forest Trees

ONE HUNDRED-FIRST PAPER

WESTERN WHITE PINE

(*Pinus Monticola* Dougl.)

The silvery luster of the needles of this tree gives it the name silver pine, by which many people know it. It appears in literature as mountain Weymouth pine, the reference being to the eastern white pine (*Pinus strobus*), which is sometimes called Weymouth pine. Finger-cone pine is a California name; so is mountain pine, and soft pine. In the same state it is called little sugar pine, to distinguish it from sugar pine (*Pinus lambertiana*), which it resembles in some particulars but not in all. It is thus seen that California is generous in bestowing names on this tree, notwithstanding it is not abundant in any part of that state and is unknown in most parts.

The botanical name means "mountain pine," and that describes the species. It does best among the mountains, and it ranges from an altitude of from 4,000 feet to 10,000 on the Sierra Nevada mountains. Sometimes trees of very large size are found near the upper limits of its range, but the best stands are in valleys and on slopes at lower altitudes. Its range lies in British Columbia, Montana, Idaho, Washington, Oregon, and California. In the latter state it follows the Sierra Nevada mountains southward to the San Joaquin river.

This species has been compared with the white pine of the East oftener than with any other species. The weights of the two woods are nearly the same, and both are light. Their fuel values are about the same. The strength of the eastern tree is a little higher, but the western species is stiffer. The woods of both are light in color, but that of the eastern tree is whiter; both are soft, but again the advantage is with the eastern tree. The western pine generally grows rapidly and the annual rings are wide; but, like most other species, it varies in its rate of growth, and trunks are found with narrow rings. The summerwood is thin, not conspicuous, and slightly resinous. The small resin passages are numerous. The heartwood is fairly durable in contact with the soil.

The western white pine has entered many markets in recent years, but it is difficult to determine what the annual cut is. Statistics often include this species and the western yellow pine under one name, or at least confuse one with the other, and there is no way to determine exactly how much of the sawmill output belongs to each. The bulk of merchantable western white pine lumber is cut in Idaho and Montana. The stands are seldom pure, but this species frequently predominates over its associates. When pure forests are found, the yield is sometimes very high, as much as 130,000 feet of logs growing on a single acre. That quantity is not often equalled by any other forest tree,

though redwood and Douglas fir sometimes go considerably above it.

The western white pine's needles grow in clusters of five and are from one and a half to four inches long. The cones are from ten to eighteen inches long. The seeds ripen the second year. Reproduction is vigorous and the forest stands are holding their own. Trees about one hundred and seventy five feet high and eight feet in diameter are met with, but the average size is one hundred feet high and two to three feet in diameter, or about the size of eastern white pine.

The wood is useful and has been giving service since the settlement of the country began, fifty or more years ago. Choice trunks were split for shakes or shingles, but the wood is inferior in splitting qualities to either eastern white pine or California sugar pine, because of more knots. The western white pine does not prune itself early or well. Dead limbs adhere to the trunk long after the sugar pine would shed them. In split products, the western white pine's principal rival has been the western red cedar. The pine has been much employed as mine timbers in the region where it is abundant. Miners generally take the most convenient wood for props, stulls, and lagging. A little higher use for pine is found among the mines, where it is made into tanks, flumes, sluice boxes, water pipes, riffle blocks, rockers, and guides for stamp mills. However, the total quantity used by miners is comparatively small. Much more goes to ranches for fences and buildings. It is serviceable, and is shipped outside the immediate region of production and is marketed in the plains states east of the Rocky mountains, where it is excellent fence material.

A larger market is found in manufacturing centers farther east. Western white pine is shipped to Chicago where it is manufactured into doors, sash, and interior finish, in competition with all the woods in that market. It is said to be of frequent occurrence that the very pine which is shipped in its rough form out of the Rocky mountain region goes back finished as doors and sash. When the mountain regions

shall have better manufacturing facilities, this will not occur. In the manufacture of window and hothouse sash, glass is more important than wood, although each is useless without the other. The principal glass factories are in the East, and it is sometimes desirable to ship the wood to the glass factory, have the sash made there, and the glazing done; and the finished sash, ready for use, may go back to the source of the timber.

The same operation is sometimes repeated for doors; but in recent years the mountain region where this pine grows has been supplied



FOREST GROWTH WESTERN WHITE PINE, MONTANA

with factories and there is now less shipping of raw material out and finished products back than formerly. The development of the fruit industry in the elevated valleys of Idaho, Montana, Washington, and Oregon has called for shipping boxes in large numbers, and western white pine has been found an ideal wood for that use. It is light in weight and in color, strong enough to satisfy all ordinary requirements, and cheap enough to bring it within reach of orchardists. It meets with lively competition from a number of other woods which

grow abundantly in the region, but it holds its ground and takes its share of the business.

Estimates of the total stand of western white pine among its native mountains have not been published, but the quantity is known to be large. It is a difficult species to estimate because it is scattered widely, large pure stands being scarce. Some large mills make a specialty of sawing this species; and the annual output is believed to reach 150,000,000 feet, most of which is in Idaho and Montana.



Disproving a Log Buyer's Idea



Bigness is the attribute that must be possessed in order to command attention these days. The heavyweight prize-fighter is proclaimed a white hope and given a chance even if he is a plain boob from the wilds of Oklahoma. The bigness of nickels, taken in the aggregate, is demonstrated by the size of the tallest skyscraper in the country. The sales manager loves to have as his road men fellows who are at least six feet tall and wear seventeen-inch collars without having too much room for their Adam's apples, and Big Business and the Big Stick are current idioms which express the admiration of the populace for prize productions in every line.

The log buyer who is charged with getting the material for a mill is not only attracted by a big bunch of logs, but by the lot which contains the biggest specimens. The sight of a big, round, fat log stirs the ambition of the buyer to surprise and amaze the mill superintendent and to show the boss that his territory is still capable of producing monarchs of the forest. Every other buyer feels the same way about it, and the consequence is that a lot of logs containing a few exceptionally big specimens invariably brings a great deal more money than if the sizes were average and if there were no remarkably large logs in the lot.

In the case of veneer mills, of course, log buyers are rather justified in going after the select logs, figuring according to size. But even here the advantages are not altogether in favor of the extremely large log, and in the straight sawmill business an exceptionally big timber is really a handicap. In the opinion of a lot of expert manufacturers of lumber, as much money is lost as is made out of handling unusually large timber of that kind.

"It looks mighty good to bring in a log thirty-six inches in diameter or over," said a hardwood man whose Kentucky mill is conceded to turn out quality stock, especially in oak, "but when you get to handling a log of that size you can be prepared for unfortunate happenings. In the first place, an oak log over three feet in diameter is going down hill. That is, the tree of which it was a part had passed its prime when it was cut. Under scientific methods of forestry, such a tree would not have been allowed to develop that size, for it is likely to have developed heart cracks, worms and other defects that come with old age. Hence getting hold of an exceptionally big log is inviting trouble in this direction.

"Then the equipment around the mill, it must be remembered, is built to take care of average-size logs. Your derrick, carriage and saws are tuned up with reference to logs smaller than the kind that bring the premium prices, and when you require them to handle a bigger load it causes delays. You never see a tremendously big log go through a mill as slick as one of the average size, for the reason that it takes longer to handle it and accidents are more frequent. You may have good luck as to the grade of lumber you get out of it, but even then, by the time you have figured the higher price you have paid and the additional labor required to manufacture it, it is doubtful if you have made anything on the transaction, or, at any rate, any more than you would have made on the same amount invested in smaller logs."

A great many hardwood manufacturers who specialize in quartered oak take the ground that even though wide quartered oak is desirable, it is not nearly so desirable as good lumber, and that consequently the small log, averaging around twenty-two inches, makes the best material from which to manufacture their specialty. Eight-inch lum-

ber in this commodity is a good width, and ten-inch is wide stock; so that a log of the size indicated makes a good average run of lumber as to width, and is much more likely to grade up nicely than if a thirty-six-inch log were cut. In a good many cases, where the larger logs are quartered and defects found, it is necessary to use the edger and trimmer anyhow to get as good a grade as possible, and the result is that the manufacturer has little advantage as to specially wide stock to offer because of his big logs.

From twenty-two to twenty-eight or thirty inches seems to be the range within which successful manufacturers like to buy their logs, and for plain oak a twenty-four-inch log can hardly be beat, it is contended. It is most likely to be sound all the way through, it is easy to handle, it does not usually cost more than the average, and it cuts up into good wide stock. What more can the lumberman desire?

The big log craze is not confined to handlers of domestic woods. Some of the mahogany producers report that their logging crews spend more time and waste more effort in getting out the real giants of the tropical forests than are justified by the results, for, as indicated in the case of trees grown in this country, it invariably requires greatly increased expense to move such a log.

In the tropics, of course, it is necessary to construct a road from the trees to the nearest stream, and the size of this road, as well as the number of oxen or men necessary to drag the big log from its native place to the stream which is to float it to the coast, or to the logging railroad which takes it to the shipping point, is much larger than under ordinary conditions. It is the same story again of handling for shipment; and, while the big derricks which are provided for handling mahogany logs are necessarily of greater load capacity than are used in other lines, there is a good deal of trouble experienced in the mill proper in handling a log of that size.

The figure in a mahogany board counts for more than the size, and, as wide stock is a feature of this class of lumber, an exceptionally wide board is not worthy of much comment; while the fact that a superb figure may be found in a small log and not in a big one indicates that in a good many cases unusual expense and trouble have been resorted to without a corresponding profit.

A veneer manufacturer who naturally likes to get hold of big logs was relating his experiences recently in this connection. A timberman who had always "toted fair" with this concern wrote in offering a bunch of logs which appealed to the manufacturer on account of their exceptional size. The price was pretty high, but the veneer man decided to invest. The logs were taken up by his inspector and looked all right, and trouble wasn't run into until they were cut into flitches and put on the veneer saw and slicer. Then came the deluge. The saws struck metal which turned out to be old horse-shoes, spikes and other foreign matter, and a few experiments showed that most of the logs had evidently been bought from farmers who had used the trees as hitching posts in years gone by. The result was that it was next to impossible to handle the logs to advantage, and by the time broken saws were repaired and delays figured, it was found that the veneers produced from them were pretty expensive—to the mill.

It is just as well to look on the large log without much enthusiasm, anyhow; for they are getting few and far between in most sections of the country. There are still a lot of the smaller sizes to be found, and as they are the best for practical purposes the passing of the giants among hardwood trees will not be greatly deplored.

Wooden Bed Logically Superior

In the issue of *Evenwood Record* dated March 19, 1912, under a general article covering the various phases of the question of substitutes for woods, a paragraph touching on the supposed claims of metal bed advocates was inserted. In that paragraph, the fallacy of the claims of the metal bed manufacturers as to the overwhelming popularity of their production was established. It was shown that there has been a considerable falling off in the sales of metal beds and while no attempt was made to go into the question in detail, the trend of the argument was that the wooden bed is increasing rather than decreasing in popularity.

This is unquestionably a fact. Granting it as such, it is interesting to review possible reasons for this condition in the face of the extravagant claims of the brass bed people.

The question must necessarily, to arrive at any satisfactory and sane conclusion, be considered on a broad basis, that is, wooden beds and brass beds as general classes of products must be taken into account rather than any one type of either. The high grade, consequently high priced lines in both makes certainly enjoy advantages which might reasonably be advanced to prove the supremacy of either line; but taken as a class, there are certain features which, considering the modern type of construction, are about on a parity.

Without considering the varying quality of articles manufactured from either kind of raw material by individual firms, it is undoubtedly a fact that the modern bed is a pretty sanitary article. Furthermore, by eliminating useless parts, its weight has been so reduced and distributed that as an article of furniture it does not offer the disagreeable features of the old style cumbersome wood or metal bed. Another quality which is analogous in both types of manufacture is the fact that both the wooden and the brass or iron bedstead have been reduced in actual size so that they now appear as but an article of furniture rather than, as formerly, occupying practically the entire bed chamber.

Thus eliminating these claims of superiority which have been advanced by the advocates of both types of beds, in order to establish the superiority of either class, it is necessary to look for further features. It is claimed by the manufacturers of the brass bedstead that there is not a sufficient quantity of high-grade cabinet woods left to enable the wooden bed manufacturer to turn out a product sufficiently inexpensive to be within the means of the average purchaser. That this is unquestionably not true can easily be proven by investigation of prevailing market prices of wooden beds as compared to brass beds of an equally high character, or if one is familiar with market conditions in hardwood lumber going into bed manufacture it can be seen that the cost of the raw material going into the manufacture of the bed will amount to very little as compared with the labor cost and other factors which go in to make up the final cost to the consumer.

But by far the greatest advantage which the wooden bed has over any other type of manufacture is its beauty. It must be admitted by the most partisan that the old style wooden bed was so entirely ugly, unwieldy and unsanitary in every way that no just claims could be made as to the sanity of using it, let alone any advantage it might have over a metal article. But this condition has been entirely eliminated. The objection to the old type of bedstead probably was directly responsible for the introduction of the modern metal bed. The old fashioned wooden article was so unsanitary and cumbersome that a change was absolutely necessary. With the successful introduction of the metal substitute, the growth in its popularity, probably as much because of the fact that it was a new thought as because of anything else, was remarkable. But the metal bed manufacturers have been their own worst enemies. They had absolutely no room for originality and beauty of design and seemingly exercised their entire scope of operation in this line by introducing the most grotesque twists and turns in the piping of the bed, thus not only creating ridiculous designs but eliminating from the advantages of the metal frame the claim of increased hygiene. This condition has gradually been improved, but in the meantime other causes have grown up which would tend to make the metal bed anything but a successful substitute for the modern wooden one. In fact, this very condition

limiting the possible designs and improvements in the brass bed created the condition which has meant a great deal for the wooden bed manufacturers. It seems that it is absolutely impossible for a concern turning out a high-grade article to sell to any advantage inasmuch as necessary simplicity of design made it possible for every buyer to ascertain definitely exactly what was in the bed and to make comparison of size of tubing, etc. Thus the different manufacturers were put on an absolute price competition and the process of handling their business ever since has been based on this condition. They have seemingly endeavored only to reduce their goods to the cheapest possible character and to sell on as narrow a margin of profit as possible. In fact, very few metal bed manufacturers turn out beds of quality and the few who have have in most cases been compelled to meet the fierce price competition or go out of business. In other words, because they did not have quality, they have not been able to advertise this feature of their production or at least if they have advertised it they have been unable to maintain it.

Public taste for house furnishings has been so wonderfully expanded in every line that the buyer nowadays demands first, style and at least seeming quality and then price in keeping with his pocket. Thus it is absolutely necessary for a concern to successfully operate a manufacturing business turning out any article of household furniture to offer something extremely attractive which he can put out at a reasonable figure. Experience has shown and it is being constantly now demonstrated that a medium priced brass bed cannot possibly meet these requirements. The decreased sales have demonstrated this condition. On the other hand, manufacturers of wooden beds have the broadest fields for variety in design, materials and finish. New ideas in keeping with different periods of furniture design are constantly being offered to the discriminating buyer. He is not compelled to merely select a bed of a certain size and either of a dull or shiny finish; but he has a myriad of designs, colors and styles in any kind of wood or combination of woods which he requires. A dignity in design involving graceful curves and massiveness, together with lightness and simplicity, can be acquired in wooden bed manufacture which is absolutely unthought of in the manufacture of any substitute article, and the beauty of it all is that that process of construction has been so reduced to a scientific basis that the labor cost is at a minimum. As to the claim that cabinet woods are too high priced to be within the popular reach, there are various kinds of wood coming in constantly which have beauty of figure and color and that offer to the buyer of a medium grade of furniture beauty and elegance. While these facts are, but opinions, although based on actual conditions, one needs only to investigate conditions in the plants of the wooden bed manufacturers, or, if he does not care to take their word for the growth of their business, he needs only to visit some large furniture sales room in which are grouped all kinds and types of furniture. The astonishing variety and beauty of the modern wooden beds which have developed as the fallacy of substituting metal in this line of construction made itself evident, will certainly convince him that the wooden bed has come back to stay.

Wood Used for Polishing Watches

An interesting use of rotten wood is in the polishing of the fine parts of the highest grade Swiss and French watches. Formerly this material was more extensively employed than at present, being largely supplanted by machinery and benzine. The escape parts and small screws are still in large part polished by hand and rotten wood. The value of the rotten wood used annually in Switzerland for this purpose is about four thousand dollars, the best quality bringing a price of one dollar per pound. What is wanted is a yellowish-white silky material, soft and spongy, brittle and very light, and in which the growth rings are still visible. Such is produced by certain fungi growing in the stumps and roots of beech, maple, ash, aspen and willow. It is not easily found, being mostly confined to southern exposures in dry, shallow, stony soils in the mountains regions.



Logging Costs—A Sane Method



Perhaps the most perplexing problem before the lumbermen and foresters today is that of logging costs. Every estimate of stumpage value demands an estimate of probable logging cost. Every projected operation calls for a choice of the cheapest method and equipment, by comparison of estimated cost under different methods and with different equipment. Usually the only solution of these important problems has been the estimate of practical loggers based upon their judgment and experience. But as stumpage values rise the importance of close estimates of logging costs becomes greater, as does also that of choosing the most efficient and cheapest method and equipment under the given conditions.

A great many lumbermen keep costs in some detail, but I believe myself safe in saying that the majority keep only such accounts as, used in conjunction with an inventory, will give them a total cost per M. This when compared with the average return per M shows their net profit. Often this total cost is itemized to show the expense per M of different parts of the operation, such as felling, skidding, loading, railroad haulage, etc. Mostly these costs are kept with the old bookkeeping point of view, viz.: debit outgo, credit income, and the balance shows profit.

Accounting, as a method of measuring efficiency of work by a careful analysis of the operation, and detailed costkeeping, is not often used.

There are numerous reasons for this state of affairs. In the first place careful cost accounting is very difficult under the continually varying conditions of a logging job. In the sawmills, where conditions are much more stable, and work can go on in a routine way, detailed cost accounting is much easier and in a great many cases is applied. Another reason is, that large timber holdings have been bought in former years at a very low stumpage valuation. Such timber can be logged and manufactured at a good profit today, whereas if the present stumpage value had to be paid, the profit would be small, and often loss would result. In other words the profit comes largely from the increased price of standing timber and consequent rise in the price of lumber, rather than as a profit on its manufacture. The average lumber manufacturer sees to it that the mill work is as efficient as possible and settles the troublesome profit of efficient logging either by letting it out under contract, or putting it in charge of some practical woodsman, to do the best he can.

In the present days of high stumpage prices, however, the efficiency of the logging end of the business has a large influence on its profits. The only sure way of determining efficiency is by careful cost accounting, and the reason why most logging costs obtainable today are of little use in this connection, is because they have seldom or never been tied in with conditions under which the work has been done.

It remains then to develop a "science" of logging, to determine the most efficient method of operation under given conditions. This is not to be easily or quickly accomplished, but I believe it can be done—never, to be sure, in any extreme detail, because of the difficulty of closely measuring the varying factors which govern logging efficiency, but yet close enough to give a fairly firm basis for the choice of logging method, and for an estimate of its probable cost.

The important factors which affect the cost of logging and which may be measured and expressed intelligibly are:

1. Stand of timber per acre.
2. Size of timber (average number logs per M).
3. Average slope.
4. "Bottom" (condition of ground, swampy, rocky, etc.).
5. Average length of haul.

Another very important factor, which is both hard to measure and to foresee in estimating cost of logging, is the character and efficiency of the available labor supply.

If now, we measure the average daily or monthly capacity of, say, a skidding crew (or any other crew performing a definite part of the operation) and state the method of work, the character of the labor, the equipments (tools, stock, machinery, etc.), and the five factions

mentioned above, we have a fair basis for comparing the efficiency of a given method of work, with another method which has been studied in the same way. In every case, however, it is necessary to analyze the operation into its distinct parts, so that if a skidding crew is also doing some other part of the work, say road building, as it goes along, we may by a ranger time study determine what proportion of the expense belongs to road making and what part to the skidding.

It will be necessary in this connection to work out average costs of operation (aside from labor costs), maintenance, and repairs of logging tools, stock, and machinery used by the crews whose capacities are studied.

When this has been done on a large number of operations and under a large number of different conditions, it will be possible to state, for any set of conditions, what is the ideal method of work, and what is the ideal equipment. It is, of course, true that the lumberman must use what he has on the spot; very often he cannot use the ideal method, even though he knows surely what it is. But such information as is described above should aid greatly in choosing the method of operation, and in buying the logging machinery and other equipment for estimating a given tract of timber.

Besides these general problems of determining the efficiency of different logging methods, every company will have its own purely local problems to solve, more detailed comparisons of cost of different ways of doing things, under the conditions peculiar to the individual operation. This can be carried by means of detail bookkeeping to any point desired. But it should always be kept in mind that comparative costs are of very little practical value unless the factors which influence them are also known. In picking the cheaper method it is necessary to know that the work was done under similar or nearly similar conditions.

Hardwood Market of Hamburg

German lumber merchants have usually confined themselves to the publication of market reports in their own language. These reports sent to American journals and to the American lumber trade have not been of particular importance because of this fact. J. F. Müller & Sons of Hamburg have issued a report dated November 11, which is printed in English and contains an interesting and instructive summary of market conditions in that center for November. According to the report, black walnut was in good demand, especially the better grades, which were not in all cases obtainable at the prices buyers had formerly been paying. Offerings of firsts and seconds were, according to report, scarce and it was the opinion of this firm that shipments of these grades would be welcome. Sales of the common grades obtained somewhat slower owing to the large quantities consigned to the Hamburg market, which created a condition of stock in excess of the actual demand. Cull walnut lumber should be sent only on firm orders as there is but a limited output for this stock.

There was a brisk demand for white oak, but the resulting business was not excessively large owing to the steadily increasing price that shippers have been asking for their lumber on account of the extraordinary rise in ocean freight rates. The bulletin calls attention to the fact that exporters should bear in mind the German preference for white oak and the difficulty of disposing of red oak stock in that market. Plain oak is equally favorably received, while quartered is of slow movement.

The better grades of chestnut occasionally find a market in Germany, although the business transacted is of small proportions. Lower grades, such as sound wormy, are not saleable. Cottonwood has reached a level of price which prevents its use to a great extent, as local and African woods can be purchased to better advantage. There is an equally limited demand for yellow poplar and very few contracts have been closed. But few entries have been obtained for red gum, while sap gum and tupelo lumber is imported on a large scale and enjoys an active inquiry. There seems to be but little demand for basswood in Germany.



The Tropical Hardwoods of Florida



For a long time there has been a halo of mystery surrounding the timber resources of Florida, particularly the tropical hardwoods that are generally known to occur in the southern part of the peninsula. The greater portion of the forests of Florida is taken up with the longleaf pine, the southern limit of which is reached in the south central part of the state; then there are a great number of northern hardwoods which find their southern limit here, such as the white, post, cow, Spanish, red and black oaks, white elm, persimmon, magnolia, yellow poplar, red and black gum and several of the ashes and hickories. Toward the southern end of the state the longleaf pine gradually gives way to the Cuban pine, a very close relative to the longleaf. The Cuban pine, however, grows only on the higher and dryer parts of the land. Interspersed among this Cuban pine and covering the tidal shores, swamps and areas bordering the streams and lakes are the tropical hardwoods. Several reports have been spread about that a timber wealth of enormous extent and in a great, undeveloped state is still lying untouched in the southern part of Florida. There is no state department in Florida charged with the survey of its forest resources and up to a recent date no examination of the forest conditions of the state had been made.

A careful survey of the forest conditions in the southern part of the peninsula shows that there is a great variety and extent of tropical hardwoods covering the entire southern end of the peninsula. This tropical growth extends farther north on the eastern coast than on the Gulf coast. This is undoubtedly due to the warming influence of the gulf stream. Although there is no hard and fast line which marks the northern limit of this tropical region, yet a line drawn from Mosquito Inlet in Volusia county on the east coast in a southwesterly direction to the lower part of Tampa Bay on the west coast will give an approximate idea of the extent of this region. A great number of the important and valuable hardwoods found in Cuba, Central America and the West Indies find their northern limit here. It is estimated that the tropical hardwoods cover in round figures about 4,000,000 acres. This represents about thirteen per cent of the total area of the state.

In the past a good portion of the more accessible tropical forests has been exploited and much valuable material has been sent to the northern markets. Although the tropical hardwoods found here do not reach the size and development that they do in the West Indies and Central America because of their location in the extreme northern part of their range, yet there is no doubt but that they will constitute an important source of supply of some of our more valuable cabinet and furniture woods, especially those manufactured locally and sent to all parts of the country.

The general popular conception of southern Florida is that it is wholly covered with swamps of which the Everglades are typical. The Everglades themselves occupy about 3,400,000 acres around Lake Okachobee and are practically treeless. Here and there a few islands dot the otherwise monotonous landscape of marsh and sawgrass. On these, Cuban pine and a few tropical shrubs and trees are scattered about, but the total amount of timber on the area included within the Everglades is negligible. Throughout the remainder of the southern end of the peninsula the tropical hardwoods occur in two general types.

The first is locally known as the mangrove swamps, which occur along the tidal shores and in the swamps bordering the streams for many miles back from the sea shores. The principal trees in this type are the red, white and black mangroves, the buttonwood and the seagrape. The mangroves often attain a size of twenty-four inches in diameter and from fifty to seventy feet in height, but the average size is considerably below these figures. They grow very close together and form a dense, almost impenetrable forest. The wood of these mangroves is hard, heavy, highly colored and durable. The trees have been cut considerably in the past both for the high market value of the woods and for their bark, which contains a high percentage of tannic acid. Much of this mangrove lumber has gone into flooring of the highest grades as well as in ship construction and piling. It has been estimated that the red mangrove has built up thousands of

acres of swamps and marshes along the sea shores by its remarkable ability to reach out into the salt water with its complex aerial root system and form new soil by holding together the sands, debris, etc., which wash in along the shores.

The second type of forest which includes some of the more important tropical hardwoods is the so-called hardwood "hammock." This type does not grow in the swampy regions, but consists of isolated areas of dense tropical hardwood trees, vines and low plants scattered about on the dryer portions throughout the southern part of the peninsula and on the long, narrow islands known as "keys" just off the coast. It is principally found on the higher land above the mangrove shore type. These "hammocks" vary from a few to several thousand acres in extent. This type is representative of what the whole forest of the southern part of Florida would be like if forest fires were excluded. The growth of trees on this type is exceedingly dense and thrifty. Young trees are continually coming up to supplant those that die out or are removed after lumbering. The growth of the individual trees is exceedingly rapid. The principal trees of this type are the Jamaica dogwood, a dark, heavy cabinet wood of very handsome grain and color; the



THE MASTIC TREE—TYPICAL OF THE "HAMMOCK" TYPE OF THE TROPICAL HARDWOODS IN SOUTHERN FLORIDA

mastic, which grows to a good size and is highly prized for its bright colored wood, and the mahogany, the greater part of which has been cut out in this region and is only found now as individual trees scattered along the keys of the coast. It grows rapidly, however, and with proper protection should be of considerable importance in the future. Other common trees are the ironwood or *lignum-vitae*, of which our billiard balls, head blocks and piling weights are usually made; the satinwood paradise tree, torch wood and two trees locally known as the gumbo limbo, or West Indian birch and manchineel. Besides these principal trees there is a great variety of tropical woods and shrubs, many of which are yet to be classified by our botanists and of which very little is known at present. Most of them, either on account of their scarcity or insufficient size, are not and will not become of great commercial importance. All of the above woods are exceedingly valuable for furniture and cabinet woods as well as for interior finish, high-grade flooring, ship construction, etc., on account of their high color, weight, close grain of great beauty, ability to take a high polish, durability, and workability.

Most of these trees reach a height of from forty to sixty feet and from fifteen to thirty inches in diameter. Many of the better speci-

mens in the more accessible regions have been cut out, leaving the more crooked and inferior trees standing in the forest. It is seldom, however, that the trees clear themselves of their limbs and form straight, tall cylindrical boles, such as we find in our better class of hardwood stands of Kentucky or the southern Appalachians. It seems to be more natural for most of these trees to grow crooked and knarly rather than to grow straight and it is very seldom that more than twenty feet of straight clear timber can be cut in one log. More often the logs have to be cut in lengths of from six to twelve feet. Owing to the fact that comparatively little general exploitation has taken place in these tropical forests in the past, the chief market for them at present consists of local industries engaged in manufacturing high-grade cabinet work and furniture from the more desirable and accessible varieties.

If it were not for the common prevalence of forest fires, the extent of the tropical forests in southern Florida would be considerably greater. The mangrove swamp forests have not been molested by forest fires on account of their naturally moist location, but the "hammock" type where our most valuable tropical hardwoods occur

has been repeatedly damaged and a great deal of it destroyed by the annual occurrence of ground fires which sweep over this region. But with forest fires eliminated these hardwood forests should be of great value to the timber interests in the future on account of their exceedingly rapid growth and high demand on the markets.

The following is a list of the most important tropical hardwoods known to southern Florida:

COMMON NAMES	SCIENTIFIC NAMES
Malacca	<i>Saccharum mahuani</i> Jacq.
Lignum vitae	<i>Gutierrezia sanctum</i> Linn.
Red mangrove	<i>Rhizophora mangle</i> Linn.
Buttonwood	<i>Conocarpus erecta</i> Linn.
White mangrove	<i>Laguncularia racemosa</i> Linn.
Black mangrove	<i>Avicennia nitida</i> Jacq.
Seagrape	<i>Coccoloba uvifera</i> Jacq.
Jamaica dogwood	<i>Alchornea thalassipila</i> Linn.
Mastic	<i>Sideroxylon masticodes</i> Jacq.
Satinwood	<i>Anthonium fagaria</i> Linn.
Gumbo limbo	<i>Bursera simaruba</i> Sarg.
Manchineel	<i>Hippomane mancinella</i> Linn.

N. C. B.



Poorly Matched Woodwork



Joseph's coat of many colors may have been artistic as a woven fabric; and the patchwork of crazy quilts was fashionable some years ago; but furniture makers are not, as a general thing, catering to good taste when they imitate those examples. The finest furniture, that which is really high grade, is made of parts which harmonize in color, grain, and figure. Numerous pieces of wood may be joined together to form a table top, bureau front, panels of sideboards, dressers or bedsteads; but there must be harmony, or the work as a whole will be more or less a failure.

Good taste is often offended by incongruous combinations of woods that do not match. A stand top is formed by joining two, three, or four pieces which are out of harmony. Colors may differ, figures may not match, grains are at variance. The sharp lines separating the component parts stand out as the most prominent feature in the whole make up. The man who puts such combinations together is evidently thinking of something besides how his work is going to look when it goes to market to be sold. A walk through many a furniture factory or store will reveal such offenses against taste; but they are more apparent in some places than in others, because some makers and dealers are more careful than others to keep such misfits in the background.

Poor combinations of woods occur in various ways. Sometimes in cheap furniture no effort is made to produce harmony. Everything or anything goes, and colors, grains, figures, different kinds of woods, and all are thrown together. That, however, is not the class of furniture now under consideration, but a better grade where appearance is supposed to count for something. Some of the mistakes and errors in combinations and matching may be pointed out without going too much into particulars.

A factory may be making red gum furniture. A workman might suppose that as long as he uses red gum he is fulfilling all necessary conditions; but every man who is familiar with that wood knows that there is sap gum and heart gum, and both may come from the same tree. The sap is whiter than the heart. Each in its place is unobjectionable, and one is as good as the other; but a strip of white sap beside a strip of darker heart in a table top is not an artistic combination, unless some kind of doctoring is done to conceal the true color of both woods. Gum is taken as an example, but carelessness or poor judgment may produce similar results with many woods which differ in color, depending on whether heart or sap is used.

Bad combinations may result in other ways than in color. Take sycamore as an example. Quarter-sawed sycamore and plain sycamore are so different in appearance that the eye distinguishes them at a glance. Yet the maker who is producing sycamore furniture

sometimes perpetrates combinations which resemble the old-fashioned "strip-about" meat counters in butcher shops. The mere fact that a certain species of wood is being faithfully adhered to is no palliation of the offense committed against good taste by joining pieces of wood together which should not be used in the same article, in a way to contrast one with the other.

Many a sin is committed against oak in the same way. Oak is a pretty broad term, and it includes colors, grains and figures almost without limit. Many a broad table top is made of pieces so tastelessly combined that colors and patterns blend in a perfect whole, and it is a perpetual delight to the eye; but often the reverse is the case. Every piece stands out to itself. The lines of separation are so plain that the eye cannot possibly pass over them without stopping to note the esthetic hiatus. Beauty is spoiled; good taste is offended; and yet the workman who contrived the combination may have supposed that he was fulfilling every requirement. For, did he not make genuine oak furniture?

It was genuine oak, without any imitation or counterfeit, but something more than that is required of oak furniture, or furniture of any other wood. The combinations must be harmonious. Quarter-sawed and plain wood should not touch edge to edge; and chestnut oak should not join with white oak, much less white oak with red oak. If that mistake is made, the contrast will be mildly or severely offensive, depending upon its degree of violence.

Bad contrasts are not infrequently produced by the process of "filling" the wood. Ash and chestnut may serve as examples. What figure these woods have is due chiefly to the rings of yearly growth. These rings are very porous, and they stand out prominently in dressed lumber, but not with equal prominence in all dressed lumber. Much depends on the way the sawing is done. If the rings are cut in a certain manner their edges are exposed to view much more than if the cutting is done in another way. The run of lumber contains pieces with the porous rings exposed in various angles. The application of fillers to such woods plugs the pores and changes the color of that part of the ring.

The result is that pieces of wood combined in broad panels, table tops, or in similar places, may match very well while the woods remain in their natural colors, but when fillers are applied, the different pieces take on different tones, due to their porosity and the varying quantities of coloring matter they absorb during the application of the filler. Inharmonious combinations in the finished article may be the consequence. The remedy in such cases consists of prevention. The porosity of the woods ought to be considered before they are placed side by side. A piece sawed radially should not be combined with one sawed tangentially. Many undesirable

contrasts seen in furniture and finish will be found, upon examination, to be due to mistakes of that kind.

Many high-grade veneers owe their chief value to the practicability of matching one piece with another. Veneers are thin, and several sheets with practically the same grain or figure are cut from a log. The same burl, crotch, or wave shows in all. The similar sheets are kept together and sold together. The manufacturer can produce perfect matches, and his panels or tops are artistic and harmonious. Sometimes a single log of specially fine figured mahogany or Circassian walnut may produce enough panels to finish a Pullman car,

a room, or even a house, and all the panels may be worked out with a harmonious arrangement of figure.

Unfortunately, all manufacturers are not so careful with their combinations. They miss opportunities to produce good effects. Bad matching is sometimes done without excuse. White wood is combined with dark wood, when there is no need for it; coarse grain with fine grain; wide rings with narrow rings; edge grain with quarter-sawn; anything of the proper size and shape may go in. These are lost opportunities, and the man who loses opportunities needlessly will soon begin to lose trade.



"Sample Car" Shipments



Where is the lumberman who will not extend himself to the limit when he gets an inquiry terminating with a paragraph like this:

"We expect to be in the market for several hundred thousand feet of this material; and if you can give us what we want as to price and grade in the first car, we shall be ready to close with you for the remainder."

That kind of statement is as much of an attraction to the average hardwood man as the storied Lorelei was to the fishermen of the Rhine. And he makes just as strong efforts to land the order for the big block of stock as the fishermen did to reach the side of the beautiful maiden. The results in both instances are not what would ordinarily be called successful.

When an inquiry suggesting that the buyer is prepared to purchase heavily in the immediate future comes in, the experienced dealer usually takes the information with a couple of bags of salt. He has probably had experience in this direction before, and knows that he seldom lands the huge contract to which veiled reference is made by the buyer. But he is a *rara avis* if he can restrain his desire to make a play for the business, and to fix up a car that is calculated to bring home the bacon, if there is really any business to be secured.

A quotation is usually made on the "sample car" which is lower than would be offered if merely that single shipment were under consideration; and the lumberman frequently goes out of his way to see that widths, lengths and grade are all a little better than necessary. In fact, the car is "salted," using the term in its better sense, and the consumer who receives it is sure to be pleased with its contents.

But does this presentation of lumber par excellence produce a wire to the effect that eight or ten more cars of the same kind may be sent forward? Hardly; for the purchaser who is wise enough to use the suggestion for the effect it has on the quality of the lumber is likewise shrewd enough to realize that, having sent one car of that kind, the lumberman will expect to get his regular profit out of the others. Hence the buyer turns to someone else and asks that a sample of his lumber be sent, and that if it is found desirable as to grade and dimensions, a big order covering the season's requirements of the factory will be placed.

Everybody realizes that a fairly large number of clever consumers are thus showing themselves to be shrewder bargainers than the lumbermen, and yet a lot of hardwood men continue to be taken in. They chase after the pot of gold at the end of the rainbow, and when they get there they find just what might have been predicted—nothing. It must be admitted, too, that the purchaser of lumber who is shrewd enough to get better lumber than the money he pays justifies is entitled to all that he receives, for, in the language of the baseball players, he "outguessed the batter." When a lumberman ships a "sample car" which is "salted" with better lumber than would go into an average car of this kind, he is frankly holding it out as a bait; and if the buyer were really to place the order for the additional lumber, it is a moral certainty that the additional shipments would not and could not be up to the standard set by the first car.

They would be up to grade and correct in measurement, of course; but not necessarily with the "trimmings" in the way of extra lengths and widths added to create the impression that the car contained particularly desirable stock. Hence, while the purchaser would

get his money's worth, he would not get more than his money's worth, as in the case of the first car. The argument of the lumberman, of course, is that the initial car is a kind of advertisement, and that he is spending a little money on his ad in order to secure a favorable impression that will result in more orders.

The same kind of proposition is frequently met with in the panel business, when consumers attempt to get quotations on small lots of built-up stock at the same rate as though a heavy order were to be placed, pleading that if the first shipment is satisfactory, the order for the additional material will be given. And cases are reported of panel men being so anxious to get the prospective big business that they accept little or no profit on the first job that goes through the factory. They ought not be disappointed if the consumer fails to produce the big lot, for in a good many cases he doesn't need more than was indicated by his "sample" order, and merely used the promise of the big trade, to be forthcoming a little later, to get a better price and possibly better panels than he could have secured otherwise.

The fallacy of the whole proposition lies in the effort of the lumberman or the panel manufacturer to do more for the new customer than he would do for the old. He is willing to ship out a better car of lumber to the man who he thinks may buy a big lot of lumber from him if that car is good, than to merit continued patronage from those to whom he has shipped heretofore by giving occasionally better stock than is absolutely necessary. Instead of "skinning" a car down to the lowest possible level as to grade and sizes, why not spend a little of the money that goes to the peripatetic buyer of "sample cars" in creating good-will on the part of those who are known to be regular and constant buyers?

Attention has been called before to the lack of the permanence of lumber business, and to the fact that too few lumbermen have customers who can be counted on to buy their supplies from them, month in and month out. If this is the case, as the experience of most members of the trade suggests, there must be a reason, and possibly it is found in the fact that the lumberman seldom makes himself worthy of the constant and uninterrupted patronage which he would like to have. If he studies the needs of his customer; tells him frankly when he ships lumber that isn't as dry as it might have been; never rushes a car of stock out a couple of weeks ahead of the date specified, and in other ways seeks to give his customer an even break all along the line, and occasionally the better part of the bargain, there will be less necessity for trying to dig up new connections which present themselves with suggestions as to the possibility of buying a sample car.

There is hardly a line of business in which regular connections are as little developed as in the lumber trade. Occasionally one finds a consumer buying on contract; but the bulk of the business is handled in single car orders picked up by canvassing the field and going after everything that offers. Possibly on account of the narrow margin of profit involved and the fact that prices are not standard, and a matter of official market quotations, few buyers would be willing to do business with one house exclusively; but it is certain that an effort in the direction of developing permanent patronage by getting in a position to deserve it is sure to have some results. G. D. C., JR.



White Oaks and Red Oaks



Editor's Note

In *HARDWOOD RECORD* of June 25, 1912 appeared an article in which I submitted a discussion of the identification of red and white oak based on wood characteristics, and with a note on the practical woodman's viewpoint. The following article treats of the same question in the same number, but is based on botanical characteristics.

It is customary for lumbermen to separate oaks in two classes, white oak and red oak, and they do not usually carry the subdivision farther. Occasionally, however, other names are used, such as post oak, chestnut oak, yellow oak, bur oak, and others. The two general classes usually suffice, and few dealers attempt to make any finer distinctions. Nevertheless, it is pretty generally understood that there are several kinds of white oaks and fully as many kinds of red oaks. Millmen are sometimes in doubt as to where a certain oak should go, whether it belongs with the white oaks or with the red oaks.

If the exact species is known, it is not very difficult to determine, from the botanist's standpoint, whether it is a red oak or a white oak. The two groups are well defined; if a certain oak does not belong in one group it must of necessity belong in the other.

The oaks of the United States have certain habits in regard to their acorns. Some of them bear bloom and mature their acorns the same year, while others blossom one year and mature the acorns the following year. That is, one group of oaks produces one-year fruit, the other produces two-year fruit. If that habit is taken as a basis for separation into groups, the matter is not difficult, provided it can be ascertained in each case whether the tree produces its acorns in one year or two. That is not always easy to determine from individual observation, for a man cannot watch a particular tree a year or two in order to find out how it manages its acorn crop. Besides, some individual oaks do not bear acorns every year, and some seldom or never do. Neither is it always easy to see the two-year acorns the first year. It often takes close observation to make them out. Even after the leaf falls, the acorns may escape casual examination, because they may be very small and may sit close to the twig. Even after they are found they may be disappointing, because in some instances the acorn at that stage is only a small, flat cup, and does not seem to have any acorn in it. However, if there are any, practice will usually enable one to see acorns on the bare limbs.

If they are found, the tree may be set down as a red oak, for the red oaks have two-year fruit, and the white oaks one year. It is better to speak of trees with the two-season acorns as black oaks. Botanists prefer to call them so, because of the general blackness of their bark. Besides, there is a particular tree whose proper name is "red oak," and it belongs to the black oak group, being simply one of several belonging to that group.

Speaking generally, but not absolutely in every instance, the trees which produce acorns in one year are good for white oak lumber at the sawmill; while those which ripen their acorns the second season make red oak lumber. This is true only if it is admitted that all oak lumber is either white oak or red oak. Most millmen so separate it. It might be chestnut oak, or post oak, or live oak, or pin oak in the woods, but when cut into lumber and sent to market, it would be either red oak or white oak.

Sawmill men and woodworkers usually determine from the color of the wood to which group it belongs. Several of the red oaks have heartwood of decidedly reddish tinge, and several white oaks have whitish wood. It often happens, however, that lumbermen judge white oaks by their bark rather than their wood. Some oaks might fall in the doubtful class, whether judged by the wood or bark. Is a live oak a white oak or a red oak, and where do chestnut oak and blue oak belong? The color of the wood alone, or the color of the bark alone, might leave doubt in the millman's mind, whether he should stack the lumber on the white oak or the red oak side of the mill yard. In doubtful cases like that—and there are several doubtful cases—it is well to let the acorns decide. If the tree ripens its crop the first year, put the lumber with the white oaks, if not, it should go with the red oaks.

There are from fifty to sixty species of oaks in the United States. Botanists do not agree among themselves on the exact number. What

one authority may call a species, another may regard only a form or variety. Nevertheless, there is agreement concerning fifty or more, and they are the most important. Some are very scarce and of little importance to lumbermen. In the lists which follow, some of the principal oaks are separated and are placed in respective groups, either white oaks or black oaks. For convenience, the botanical names are first given, followed by one or more of the common names by which the trees are known, and these are followed by information concerning the range of the tree, where it is most abundant. The white oak group is properly headed by the common white oak, and the black oaks by the common red oak.

THE WHITE OAKS

Quercus alba—White oak, range in eastern half of the United States.
Quercus muhlenbergii—Post oak, iron oak, box oak, brash oak; range from Massachusetts to Texas, scarce in the upper Mississippi valley.

Quercus macrocarpa—Burr oak, mossycup oak, overcup white oak, in most parts of the country east of the Rocky mountains.

Quercus lyrata—Overcup oak, swamp post oak, water white oak, swamp white oak; south of Potomac river, and generally south of Ohio river to Florida and Texas.

Quercus lobata—California white oak, valley oak, weeping oak; range in California.

Quercus garryana—Pacific post oak, Oregon white oak, western white oak; range, Pacific coast.

Quercus platanioides—Swamp white oak, swamp oak; range from Maine to Missouri and Arkansas; not in extreme South, or in northern Lake states.

Quercus michauxii—Cow oak, basket oak, swamp chestnut oak; range from Delaware to Florida and west through Gulf states to Texas, and north to Missouri and southern Indiana.

Quercus prinus—Chestnut oak, rock oak, tanbark oak, mountain oak; range from Maine to Maryland and along the mountains of Georgia, west to Ohio, Kentucky, and Tennessee.

Quercus acuminata—Chinquapin oak, chestnut oak, pin oak, rock oak; range from New York to Nebraska, south to Texas.

Quercus virginiana—Live oak; range from Virginia to Florida and in the Gulf states west to Texas.

THE RED OAKS (OR BLACK OAKS)

Quercus rubra—Red oak, black oak; range from New England to the Lake states, south to middle Tennessee, and along the mountains to Georgia.

Quercus texana—Texas oak, Texas red oak, southern red oak, spotted oak; range from the Ohio valley to Texas.

Quercus palustris—Pin oak, swamp Spanish oak, water oak, swamp oak; range from Massachusetts to Missouri, south to Virginia and Arkansas.

Quercus velutina—Yellow oak, black oak, quercitron oak, yellow bark oak, spotted oak; range from New England to Florida, west to Minnesota and Texas.

Quercus coccinea—Scarlet oak, red oak, black oak, Spanish oak; range from New England to Nebraska, south to North Carolina and Tennessee.

Quercus californica—California black oak, mountain black oak, Kellogg's oak; range, Oregon and California.

Quercus digitata—Spanish oak, red oak, Spanish water oak; range from New Jersey to Florida, west to Missouri and Texas.

Quercus marilandica—Black jack, jack oak, iron oak, black oak, scrub oak; range from New York to Nebraska, south to Florida and Texas.

Quercus nigra—Water oak, duck oak, possum oak, punk oak; range from Delaware to Florida, west through Gulf states to Texas and Arkansas.

Quercus phellos—Willow oak, peach oak, water oak, swamp willow oak; range from New Jersey to Florida, west to Texas and Arkansas, north to Kentucky.

Quercus imbricaria—Shingle oak, laurel oak, jack oak, water oak; range from Pennsylvania to Wisconsin, south to Georgia, west to Arkansas.

Quercus chrysolepis—Canyon live oak, maul oak, iron oak, black live oak, golden cup oak; range from Oregon, through California and Arizona to New Mexico.

Quercus densiflora—Tanbark oak, California chestnut oak, peach oak, live oak; range, Oregon and California.

The foregoing lists include eleven white oaks and thirteen red or black oaks. They constitute less than half of the whole number, but those omitted are not generally important. Some are scarce, others

are small. Nearly all of those omitted are, however, of some importance in restricted regions. Among such are the following white oaks: Rocky Mountain blue oak, gambel oak, California blue oak, Arizona white oak, and netleaf oak. Among minor red or black oaks are turkey oak, laurel oak, highland oak, and California live oak, the last one being regarded by some as a white oak.

In the statistics of sawmill cut collected yearly by the United States census, the oak lumber is not even divided into white oak and red oak classes, but all goes in simply as oak. Manufacturers who use oak are nearly always desirous of separating white oak lumber from red oak, and some go further and keep species separate where they can. In a report on wood using industries in Michigan, recently issued, the manufacturers listed five white oaks and three red oaks. A similar report for Illinois listed four white and five red oaks; while a like report from Texas carried the subdivision still further, and listed ten white oaks and eleven red oaks.

Log cutters in the woods can separate the different oaks much easier than the lumber can be separated after the sawing is done.

Most timbermen know the principal oaks by sight, but it takes an expert yardman to pick out the various kinds of oak lumber from a common heap. If it is the purpose to separate the oaks, it is better to do it in the woods, and mark the logs. That will help the yardman to keep the lumber apart. Railroads are pretty careful to keep white oak and red oak ties separate. It is more important with ties than with lumber kept dry, for red oaks are generally more susceptible to decay than white oaks. Manufacturers of tight cooperage are another class who are strict in keeping white oaks and red oaks apart because the red oaks are too porous for some of the highest grade barrels. Furniture makers and manufacturers of interior finish use both white oak and red oak, but they usually want either one or the other, and it is to the lumberman's advantage to be able to ship white oak to the man who orders it, and red oak when ordered, and not in mixed lots. In order to do this, identification and separation ought to begin in the woods, and it can then be carried through the mill, into the yards, and finally on board the cars, and each customer will receive the kind of oak he asks for.



Specializing Proves Its Worth



One of the most important consumers of hardwoods in the Ohio valley was never a prospect for lumbermen of that territory, save to a small extent, for a very interesting and convincing reason: it made its own lumber. It regarded its sawmill as one of the departments of the factory proper, and, while it never undertook the job of manufacturing its own paints or tanning the leather which it used in some of its goods, it did not see why the production of lumber should not be regarded as a factory proposition, just as cutting it into sizes was a recognized part of factory routine.

Consequently it maintained a regular department for the purchase of logs; had buyers out in the hardwood country within a radius of several hundred miles, and got its consignments of logs just as regularly as the sawmill men in the same town with it. The head of the lumber department was an experienced man, and there was no fault to be found with the lumber which his mill turned out. The system used by the company apparently was a successful one, and to all appearances refuted the frequently heard assertion that this is the day of the specialist, and that the company which succeeds confines itself as closely as possible to its own particular business.

Recently the announcement went out that the sawmill was to be closed down and operations discontinued. The reason given at the time was that the building where this work had been done was needed for the uses of another department, which had been added a few months before by the manufacturer. Later on the head of the lumber department, who had undergone a metamorphosis by which he was changed from a manufacturer of lumber to a buyer, said that the reason for the change was that the timber country in which the concern had been buying was pretty well cut out, and that it was being forced to go further away from the factory than it liked to get its logs. The long haul involved too much expense, and the economy of the proposition had been reduced to such a point that it was no longer worth while to maintain the department.

In spite of this assertion, however, the mills which have been running for years in that locality are continuing to operate, and seem to be getting enough logs for their requirements; so that, while the growing scarcity of timber undoubtedly affected the convenience of operation, this could not have been the only reason for the change.

The company, as indicated, has just taken on a new line of work, and is manufacturing an article somewhat different from the line to which its attention has been devoted. It needs additional capital for this work, of course, and in order to get the best results from its business it is finding it advantageous, without doubt, to concentrate all of its resources on its manufacturing lines proper. In other words, instead of spending money to buy logs, cut the timber into lumber, sort it and leave it on sticks for a year—the time usually given by this concern in drying its lumber—it is taking the same

money and using it for the manufacture of the product which it sells to the trade, and out of which it can get a return almost immediately.

The fact that the lumberman is now going to make an incidental profit on the material consumed in the factory, which heretofore has gone to the consumer himself, by virtue of his operation of a sawmill, does not alter the fundamental fact that more money can be made by using the capital and other resources of the concern to turn out goods rapidly than by attempting to squeeze a profit out of the manufacture of materials which it uses.

Another interesting fact in this connection is that the manufacturer, in operating his sawmill, cut all of his lumber to the dimensions required for the goods turned out of the factory. It was dried in this way and went to the factory proper ready for dressing and actual use. The advantage of doing this work at the sawmill impressed the company to such an extent that now that it is to buy all of its lumber, instead of only a part of it, it will purchase dimension stock, and not random lengths and widths. So that, while the company will be in the open market for lumber hereafter, it will still not be a prospect for those who are not prepared to sell lumber cut to size.

The whole question of specialization is thus given a double significance: first, the consuming manufacturer decides to make his special product and quit manufacturing lumber; and second, he is going to buy from concerns which are themselves specializing in the lumber field and are furnishing consumers with stock cut to the size required and not just as it came from the log.

The experience of this concern is suggestive, for the reason that actual demonstrations of this kind are sometimes needed to convince one that it is not only more convenient, but actually more profitable to concentrate instead of spreading out capital and energy over the large space made necessary through the operation of a great number of departments. Even the largest consumers of lumber, with but one or two exceptions, buy their lumber; and if their knowledge of the situation has demonstrated the futility of attempting to increase net earnings by getting a manufacturer's profit out of the materials used in the business, it is pretty clear that the average consumer is making no mistake by doing likewise.

Instead of users of lumber wanting to go into the lumber business, the tendency is just the other way, as was suggested by the fact that the company which has been making its own lumber is now to be a user of dimension stock made somewhere else. In just the same way furniture manufacturers and others are buying all of their glued-up stock from manufacturers who specialize in this material; and in that business the usual plan is for the panel man to buy his veneers instead of making them himself. Thus the apparent wastefulness of the plan which requires the services of a great number of specialists,

each of whom necessarily gets a profit out of his contribution. The finished article, is shown to be, in the last analysis, the only economical method of production.

The secret, of course, is in doing business with as small a capital investment as possible; or, to turn the situation around, to get as large a turnover as possible out of the capital available. If the manufacturer has exhausted his selling field and has reached a point where it is impossible to sell more goods, then, conceivably, it would pay him to turn around and seek for methods of increasing his profits by going into the manufacture of the goods which he himself consumes. But a situation such as this is hardly likely to develop in America for many years to come, for in every line the proclamation is heard that the field is just being properly developed, and that consumption is expanding in every direction. Hence the greatest profits are still to be had by confining attention to insuring a big production of the article which is being made, and earning the profits from its sale rather than in the manufacture of the goods of which it is made.

There are of course other advantages in that better work can be done by specialists. The glue-room problems which are simple to the panel manufacturer, who handles them every day, are sometimes hard puzzles in the consuming factory which lays its own veneers; and it is hardly likely that if a furniture man decided to make his own hardware and mirrors he could do the work as well or as cheaply as those who have made a life job of finding out how to produce those goods best and most economically. It is usually cheaper, more con-

venient and better from the standpoint of results to let the other man do it, if possible, and to reduce overhead expense, capital investment and a lot of other important charges to the minimum in the factory.

A striking evidence of the extent to which specialization is carried is furnished in the textile trade, one of the oldest and best developed of all. Take a cotton shirt, for example, and imagine the number of hands through which it passed. First the cotton was grown; then the ginner cleaned and baled it; then the spinner purchased the cotton and sold the yarn to the weaver, who made up the fabric. Then the converter or dyer colored it, the sales agent passed it on to the shirt manufacturer, who probably sold it to the retailer by way of the jobber before it finally reached the hands of the ultimate consumer.

This seems like a roundabout way to produce a shirt; and yet it is unquestionably the best that could be devised. When it is remembered, too, that specialization is carried on to the extent that a spinning mill produces but one kind and grade of yarns, as a rule, and that the weavers content themselves with specializing in one class of goods, beyond which they do not attempt to go, it will be realized that the business is made up of specialists and specialists only.

Consumers of lumber as a rule are willing to buy lumber without worrying too much about the profits made in its manufacture; and now they are going a little further and expressing their willingness to pay out more money for having the stock cut to the sizes required by their individual businesses.

G. D. C. JR.



Traffic Matters Around Memphis



The Lumbermen's Traffic Bureau of Memphis, acting for shippers of hardwood lumber from this city and from points in the Memphis territory have filed a formal petition with the Interstate Commerce Commission at Washington, not only protesting against the proposed advances in almost every direction but also asking for reductions in existing rates. The petition was prepared through J. H. Townsend of the Lumbermen's Traffic Bureau and presented to the commission by John R. Walker, a prominent rate expert at Washington, and is styled James E. Stark & Co. et al vs. the Illinois Central Railroad Company et al. This is the first step in what promises to be one of the most important contests on record involving rates on hardwood lumber shipments from the southern territory, and the Memphis lumbermen enter it with an unbroken record of victories in all similar fights before the commission.

In the claim set out by the lumbermen it is said that the agricultural resources of parts of the country around Memphis are not being developed because railroads have advanced freight rates on certain lumber which is practically prohibiting the shipments of the commodity of lands virtually cleared for farm use.

It is also claimed that railroads have made advancements in such freight rates until hardships are worked on consumers, thereby preventing building advancement as is always necessary in a country filling up with homeseekers.

No claim is made to seek reparation on shipments which have been made in the past, but reasonable rates for the future are asked that the increasing difficulties of their business may be successfully coped with; that the price of lumber to the consumer may not be inordinately increased and that the development of the section in which their operations are located may not be retarded.

The petition asks the commission to prohibit any further increase on hardwood lumber freight rates governing shipments of hardwood lumber, but to reduce them two cents per hundred pounds less than quoted in the new tariffs submitted to the commission by railroads.

In the petition claim is made that the Illinois Central and Yazoo & Mississippi Valley railroads are common carriers and that a major portion of lumber shipments made from this section is delivered to the so-called Western Trunk Line territory and Illinois-Wisconsin territory and to the Buffalo and Pittsburgh zones. It is

shown that the railroad's way of fixing through lumber rates from Memphis is by adding the proportional rates beyond the Ohio and Mississippi river crossings.

It is shown that several railroads mentioned in the petition reach the heart of the lumber sections around Memphis and in Memphis, and that their own lines extend beyond prohibitive rate-fixing territories, some even reaching from Memphis into the territory described in circulars issued by various freight associations and complied with by defendants mentioned in the complaint.

The lumbermen believe if these roads maintain their usual way of basing through rates from Memphis, that there should be a lower rate granted from this territory to points in which the through lines reach and where no exchange of business is necessary. Claim is also made that the present through rates are unjust and unreasonable and in violation of the act to regulate commerce.

The complainants deny any decrease in the movement of hardwood lumber as stated by the defendants. It is shown that there is a big increase instead of a decrease and that the railroad's reports are not correct because the growing scarcity of stumpage and its remoteness from points of manufacturers, creates a hardship on mills to furnish same, and that this fact alone is worthy of consideration in asking for a reduction in such rates.

Other rate matters occupy the attention of the manager and members of the advisory board of the Lumbermen's Traffic Bureau and will do so for an indefinite period. At a recent meeting of the bureau three new members were added to the advisory board, as follows, bringing the entire number to thirteen: Frank Fee of the Fec-Crayton Lumber Company, John Dwyer of the Lamb-Fish Lumber Company, and John W. McClure of the Bellgrade Lumber Company. At this meeting the fight against the proposed advance on hardwood lumber shipments from points in the southern territory to Canadian destinations was discussed and it was decided that a committee go from the Lumbermen's Traffic Bureau to St. Louis December 16, when the hearing of that case before the Interstate Commerce Commission will come up. Efforts were made to secure the meeting for Memphis, but these have failed. The bureau is still working upon the proposition of securing the issuance of through bills of lading on hardwood lumber shipments over lines west of the

Mississippi river. The railroads have, since about the middle of October, refused to issue through bills on export shipments of hardwood lumber on the plea that they were charged with demurrage by the steamship companies and on the additional plea that this was the only way of avoiding congestion in New Orleans. This matter is being handled through the petition filed with the Interstate Commerce Commission in the name of the Anderson-Tully Company of this city.

There will be a hearing in Memphis December 13-14, in connection with estimated weights on hardwood lumber shipments and the Lumbermen's Traffic Bureau, as well as members of the lumber fraternity here, are very busy preparing the necessary data. It is charged by the lumber companies that the railroads are somewhat arbitrary in fixing estimated weights on hardwood lumber shipments and that shippers have had to suffer considerable financial loss as a result of the weights in vogue.

Announcement has been received from the Interstate Commerce Commission at Washington that the proposed advances from Memphis and the Memphis territory to New Orleans and the other ports, as well as to practically all destinations in this country, have been suspended, pending a hearing of the arguments of the lumbermen. It is not known just what length of time will be allowed, but the action of the Interstate Commerce Commission insures that these advances will not be allowed to become effective, if at all, before the

lumbermen have had an opportunity of presenting their side of the controversy. The Lumbermen's Traffic Bureau is rapidly completing the necessary data to be used in filing these hearings before the Interstate Commerce Commission and it is anticipated that victory will result for the shippers. Some of the advances have been attempted by the railroads in this territory before, but have been overruled by the Interstate Commerce Commission on the ground that they were both unreasonable and unjustifiable. An effort will also be made to show that discrimination is being practiced against lumber shippers operating in the Memphis territory in the respect that the new rates will put Memphis out of line with other cities, with which it has to compete.

The car situation has shown some further improvement in the Memphis territory recently and the outlook is considered reasonably good. There is still a shortage of cars at some points in Arkansas and Mississippi and the movement of both timber and lumber is restricted on this account. As a general rule, however, it may be said that conditions are getting better and after the first of the year it ought to be possible to secure a larger share of full requirements. This statement is based on the fact that the cotton movement will have passed its climax by that time and that a great deal of the equipment of the southern roads which went to the North and West to aid in the movement of the grain crops is returning to the lines which own them.

Commercial Foreign Woods

THE TULIP WOODS

The Indian or seaside tulip wood (*Thespesia populnea*-Lam.) is a common tree along the shores of nearly all tropical countries. While it grows abundantly in Cuba and Jamaica, it is still more plentiful in West Africa, where the tree attains a height of forty or fifty feet. It is also found in commercial quantities in India and in the islands of the Pacific ocean. The wood is considered almost indestructible under water and is therefore used for boat building. Its hardness, toughness and durability render it valuable for cabinet making, spokes, carriage building, carving, and building purposes. In Ceylon it is employed for gun stocks. The use of this wood is limited, however, from the difficulty of getting it of large size. In India the young trees are cut for use as rafters for houses, and generally command a good price when sold for this purpose. The wood is dark red, resembling some grades of mahogany, but it is very variable in this respect.

In the West Indies this tree grows very rapidly and produces a splendid shade. It is variously known as santa maria, palo de jaqueca, and majuquilla. Its inner bark yields a valuable, tough fiber, which is used for making rope. This fiber is used in Demarara, British Guiana, for making coffee bags, and the finer pieces of it for cigar envelopes.

Brazilian tulip wood (*Physocalymma scaberrimum* Pohl.) is a South American tree that is used for inlaying, brush backs, tool handles, and small turned articles, but is now becoming very scarce. The logs are sold chiefly in the English markets and are cut and trimmed in about the same way purple heart (*Copaifera pubiflora*-Benth.) of British Guiana is prepared. The wood is very wasteful and splintery. It is rose-colored and beautifully figured, with darker colored lines. While this wood is very handsome, it is said to fade on long exposure to the air and light.

French tulip wood, which has not been determined botanically, remotely resembles a variegated cedar wood (*Juniperus*). It has a much straighter and closer grain and is softer than the Brazilian tulip wood. The longitudinal orange-red streaks are well defined and render the wood very beautiful. It is said to be an excellent furniture and turnery wood.

Australian tulip wood (*Harpullia pendula*-Planch.) is a lofty tree with a stem of from eighteen to twenty-four inches in diameter. It is the best Australian wood for lithographer's scrapers and engrav-

ing. The beautiful dark and yellow colored lines render this wood very costly and suitable for ornamental work. In this respect it resembles the Brazilian tulip wood.

Another tulip wood from northeastern Australia is the *Stenocarpa sinuatus*-Endl., which supplies beautifully marked, close-grained, hard, and very durable wood susceptible to good polish. It is used largely for staves and veneers.

A less important tulip wood from Australia is the *Lagunaria pater-soni*-Don. This tree yields a very close-grained wood used principally for building purposes.

In the Philippine islands is a tulip wood known to botanists as *Aphananthe philippinensis*-Planch. This tree produces a light-colored wood, resembling our white elm and has nearly similar uses.

Owenia venosa-F. Muell. from Australia is also sometimes called tulip wood, but it is a mahogany-like wood and is used chiefly for making furniture.

LIGNUM-VITAE

Lignum-vitae (*Guayacan officinale*) is a tree which usually attains a height of from fifteen to twenty-five feet and a diameter of about eighteen inches four feet from the ground. It is found in Mexico, Central America, Colombia, Venezuela, Guianas, and on all the islands of the West Indies. In Mexico and Central America this tree attains its best development and often grows to the height of from forty to sixty feet and nearly two feet in diameter. The wood is exceedingly close and cross-grained, hard (about seventy-six pounds per cubic foot), of a rich greenish brown color, and often prettily marked, looking very well when polished. It is often used for making furniture, ship-blocks, pestles, mortars, rulers, heads of croquet mallets, and string-boxes and machine-bearings. It is preferable to metal for the latter uses. The wood is very durable and this quality coupled with its extreme strength and hardness renders it one of the most valuable woods of tropical America. Enormous quantities of this wood are now being used annually for bearings, etc., and the supply is becoming limited and the price consequently very high.

Guayacan officinale does not grow in the United States, but *Guayacan sanctum*, a closely allied tree, is found on the keys of southern Florida and in Texas, where it occurs too sparingly to be commercially important. It sometimes grows to be thirty feet in

height and over twelve inches in diameter. This species was formerly very abundant on the coast hills of Porto Rico, but now the merchantable trees are nearly exterminated. The wood is considered as valuable as that of *Guayacan officinale*.

Maracaiba lignum-vitae (*Guayacan arboreum*) of Brazil, also called palo santo, is a tree that grows from sixty to seventy feet in height and upwards to two feet in diameter. The wood is dark brown, excessively hard, fine and close-grained, and has structural and other qualities similar to those of true lignum-vitae.

West Indian or Martinique ironwood (*Ixora ferrea*), called lignum-vitae in British Guiana, is a dark brown and exceedingly hard wood, valuable for cogs, shafts and furniture, and is often used as a substitute for the true lignum-vitae.

One of the best substitutes that is available for use in place of the vanishing supply of lignum vitae is the mancono (*Xanthostemon verdugonianus*) of the Philippine Islands. The genuine kind has a resinous odor, which the mancono does not possess, and while it is different also in other respects, it has good enough qualities to indicate that it might be utilized as a successful substitute. It is closely related botanically to *Guayacan officinale*.

The African lignum-vitae (*Combretum truncatum*) is a large tree, which is abundant in lower Guinea and the Mosambique districts.

The wood is very hard, heavy, close-grained, with a deep reddish-brown heartwood and light-colored sapwood.

Other woods used for engraving, turning, tool-handles, and walking sticks, and suitable for all the purposes for which true lignum-vitae is now employed are produced by the following Australian trees commonly known as Australian lignum-vitae, and are botanically called *Aceri foliata*, *Myrtus semicordata*, *Eucalyptus polyanthema*, *Phyllanthus ferdinandi*, and *Vitex lignum-vitae*.

India supplies a very important wood known as lignum-vitae of Pegu (*Melanorrhaca usitalissima*). The Burmese call it thitsi and the English-speaking people of India have named it the varnish tree, because it exudes a black resin which repels ants. It grows plentifully in different parts of India and Burma, and forms extensive forests, where the trees attain often enormous sizes. Some of the trees have a clear length of forty-five feet to the first branches, with a diameter of about four feet near the ground. The wood is exceedingly hard, heavy, very fine and close-grained and is of a reddish brown color. Its extreme closeness of grain and density of structure suggests a relationship with the true lignum-vitae. The specific gravity of this wood is so great that it often serves in place of iron as anchors for the native boats; a cubic foot weighs about fifty four pounds. It answers very well for the purposes for which the West Indian kinds are now used so extensively.



Equitable Rate Adjustment



The discussion of the various phases of rate charges is so constant and has led to such an aggravation of the contenders that the wonder arises that some amicable method of settling the question for all time has not long ago been advanced. In treating of the question, a writer in a recent issue of Trade and Transportation says that late press reports credit the western railroads with planning another move for a general freight rate advance. This may or may not be intended by the carriers, but there is sufficient color to these rumors to suggest a discussion of the subject—a discussion not in the spirit of adverse criticism because an advance may be contemplated, but rather with the thought of arriving at a more comprehensive, and a less objectionable procedure than was followed on the occasion of the attempted general rate advance of June, 1910, and as employed in other instances since that time.

The purpose of the article may be assumed to be that the carriers have in preparation for presentation before the Interstate Commerce Commission a showing of a need for greater revenue for up-keep, reasonable return on investment, to maintain a satisfactory standard of credit and for extensions and improvements, and which they believe may be secured only by charging higher freight rates. With this condition then we are brought face to face with the question of the method, or the best method, to be followed in undertaking to make the advances—a method calculated to secure the desired result and to entail the least hardship upon producers, middlemen, consumers and the carriers themselves, and that would encounter the least opposition at the hands of the freight paying public in general.

Perhaps a more unsatisfactory plan than that adopted by the carriers in the general rate advance instance could not be hit upon. To emphasize this statement it is only necessary to recall how, without conferring with shippers, and in close secrecy, amendments were printed to the principal mid-western tariffs; and how these amendments were kept out of the hands of shippers until within a few days, ten days or two weeks, of date effective. By reason of this method of procedure, and in the belief that the changes had been hastily considered and contained many advances which were unreasonable and injurious, vigorous protest was made, finally resulting in prolonged and expensive hearings, and in the end meeting with disapproval of the commission.

This experience was probably typical of others and is mentioned to bring under review the effect on shippers. Promptly on receipt of these amendments, the changes were canvassed with the result that

trips were taken and calls made on executive traffic officials of the railroads serving St. Joseph, Mo., upon whom it was urged that conference be granted to shippers with a view to arriving at more equitable adjustments. To these officials it was pointed out how such a conference would disclose to them the fact that while some of the advances could be accepted without hardship, others ought not to stand, while in still other instances no advances were announced where the same could be made; that on the whole there was every prospect that in conference the way would be clear to secure the same measure of increase, and at the same time allay objection. The carriers were not asked to hold their tariffs in abeyance (legally they could not) but merely for assurances that at an early day they would meet their patrons in conference to go over the schedules with a view of readjustment. This request was denied. With a situation of this kind before them there was nothing left to the shippers but to tamely submit—or fight it out. Surely a better plan may be found should the time come when the carriers again feel warranted in moving for higher rates!

The writer further says:

"I believe it fair to say that in a majority of instances petitions for rate reductions in the Middle West have origin in a desire to overcome inequalities or for the removal of discrimination between either localities, commodities or individuals; or that were there greater equality in these respects complaints, compared to the present, would be few and far between. This being true, then some feasible plan for solution of these questions is desirable. The wise builder looks to the soundness of the foundation before erecting the superstructure. Seemingly too many rate structures have arisen without the due regard to the foundation, and because of this there is almost continuous rate contention and litigation, and from which cause the carriers encounter their most serious rate difficulties. That there is solution of these difficulties along the way of conference I firmly believe.

"By conference, in this instance, is meant something entirely different from that in vogue in recent years. It means the coming together of carriers and shippers imbued with a spirit of give and take; with a determination to arrive at adjustments as nearly equitable as it may be possible to reach. When the foundation of equality is laid, then, and then only, should be considered the matter of advances to a general higher level; and advances from this point ought to be horizontally made, or almost wholly so. If advances be brought forward in this manner, and if sufficient reason be shown for

having higher rates, it is a good guess that no serious objection would be encountered.

"I realize that a conference of this kind would be no affair of a day, nor the business of a boy, but rather one of weeks and demanding the attention and best thought of those well equipped by experience and responsibility. And, too, it should have the advice and council of one or more members of the commission, sitting informally. A conference of such scope could scarcely fail of results of vast consequence to all concerned."

As an instance of rate inequality which might be considered in conference, take the range of rates between the Mississippi and the Missouri rivers, where the spread is from sixty cents on first class down to six cents on commodity. Without alleging that either of these be too high or unduly low it is unquestionably a fact that along the way are numberless cases where greater equality would be had through realignment.

To turn to a closer view of detail, let it be assumed that a conference of this character be decided upon; then arises the question of how to proceed with it. In fitting detail to any plan there are generally a variety of ways in which to proceed, hence the first coming to mind may not prove the best one, so in this instance the suggestion to follow is tentative; merely an outline to point a possible way:

Assuming there be a docket containing a compilation of rate changes proposed, together with a call for a conference with shippers for a discussion of the same in an endeavor to reach an agreement, with the assembling of the carriers and shippers it is easy to predict that the gathering would readily decide upon a method of procedure and quickly resolve itself into an efficient working organization. But to enter somewhat further into detail:

In the absence of a better suggestion, one plan to follow would be that of making up a presiding committee of, say, five, two of them to be selected by the carriers, two by the shippers and these to agree upon the fifth. The body so constituted to hear testimony and evidence from both sides, examine and cross-examine witnesses and by other proper means endeavor to arrive at a fair and equitable conclusion on the questions at issue.

Though any conclusion reached by a committee so constituted and under such circumstances would carry no legal authority, the moral influence should be material. A report from a committee of this kind should, at least, carry conviction to the conferring principals, and at the same time convey to the minds of the Interstate Commerce Commission an unmistakable expression of opinion. An opinion so expressed ought to command, and doubtless would receive, the serious consideration of that body.

Only by giving this or some similar plan a trial could it be determined to what extent the various communities concerned might be interested, but the simple fact that those participating would have voice in the selection of the presiding committee encourages the belief that the representation would be complete. Further than this, I much mistake the prevailing sentiment if in a conference of the kind the shipping interests would not be found ready to co-operate, and to "give and take" to all reasonable extent.

In giving expression to these thoughts the writer does not assume that the last word has been uttered for solving the problem under consideration, but does submit that until there is made a real effort for solution of the freight rate question (by co-operation) it cannot be claimed fairly that the carriers and the shippers have discharged their obligations in this respect.



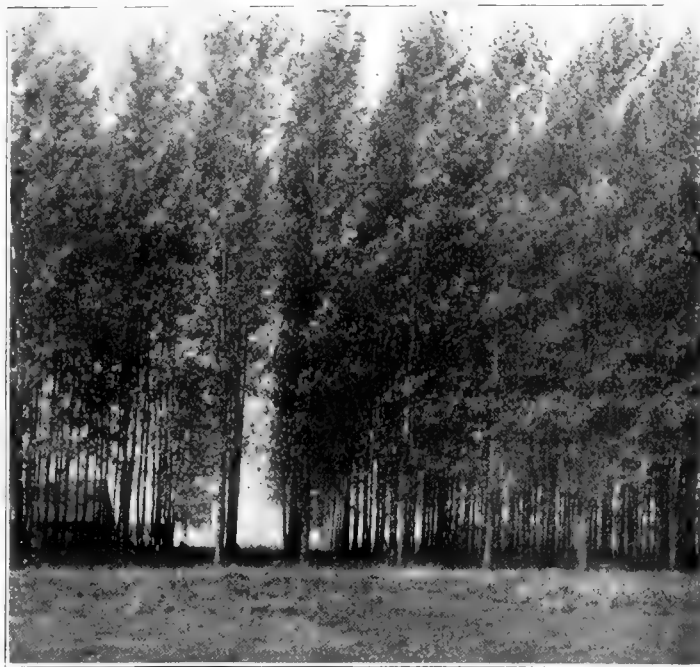
Cottonwood for Windbreaks



Cottonwood is the tree best suited for windbrakes in the Middle West if planted on good, moist situations, on river bottoms, or, in the extreme eastern part of the region, on rolling uplands. Best results are secured by planting the trees in belts from one hundred and twenty-five to one hundred and fifty feet wide, running east and west. The tree is not long-lived, but grows more rapidly than any other native tree within its range, so that at the end of a few years it yields a good rental in fuel. If the trees are not cut until about forty-five years old they will be approximately ninety feet high.

The wood of cottonwood is light, soft and spongy and in a natural state is not durable in contact with the soil. The lumber has value, however, for a great many purposes, particularly in localities where other timber is scarce. In the prairie states cottonwood is worth about ten dollars per thousand board feet on the stump, and two dollars per cord for fuel. The larger trees contain a very large proportion of merchantable lumber, and eighty per cent of the total volume. It is suitable for rough construction, bridge planking, box boards, backing in veneers, the sides and bottoms of drawers, wood pulp and matches. If properly treated with creosote the smaller sizes are well adapted for posts for which there is an increasing demand.

In addition to its value for windbreaks cottonwood also pays



FINE GROVE OF TEN-YEAR OLD COTTONWOODS ON LOW GROUND, ELMORE, FARIBAUT COUNTY, MINNESOTA. BOLES UNUSUALLY STRAIGHT AND CLEAR. PLANTED 5x6; THINNED TO 6x10

direct returns from plantations. If the trees are planted along the stream banks in belts from two hundred to three hundred feet wide, they will prevent the erosion of fertile bottomlands, which was so destructive in many western river bottoms during the floods of last spring. Such a belt of trees will afford all the advantage of a levee without exposing the protected land to the danger of a break. The trees will break up the current of any overflow that occurs and will help to keep the main current confined to the channel of the stream. Cottonwood should not be planted where the moisture supply of the soil is limited; but if its roots can reach water it will endure prolonged drought without injury.

Cottonwood can be grown from seed very readily. Seedlings are so abundantly produced naturally on the sandbars of rivers that nurserymen have no trouble supplying the demands of the market

from this source. For this reason it is seldom necessary to sow the seed. The wild stock is just as serviceable as nursery-grown seedlings and is much cheaper. Cuttings may also be employed and in the case of the Carolina and Norway poplars, it is necessary to use cuttings exclusively since these trees bear no fruit. This is often a decided advantage as the annoyance occasioned by the cotton-covered seeds blowing about is avoided.

S. J. R.



Northwestern Lumbermen Meet



The Northwestern Hardwood Lumbermen's Association met for its twenty-fourth annual convention at the Commercial Club rooms in Minneapolis on December 3. Social features were provided to follow the business session.

President W. H. Sill called the meeting to order at 4 P. M. Following the address of Secretary J. F. Hayden, the president presented his annual talk. He expressed himself as particularly grateful for the fact that the membership roll was complete for its second successive year. This was considered rather remarkable in that there has been a larger than normal percentage of failures in the commercial world the past year. The president reviewed the comments on the situation at last year's meeting, at which time it was reported that plain birch was slow, red birch moving very poorly and no sale for curly birch. Basswood was also slow, ash and soft maple far below normal, rock elm dead, and the grades of number two and three common in all woods extremely slow. However, during the past few weeks particularly a decided change for the better has been noted. Plain birch is now moving with more ease than ever before, with red in better demand. Common basswood now drags considerably, but low grades of both birch and basswood have advanced materially, while ash and soft elm have made corresponding gains. Even rock elm is showing some life, due to non-production. The advanced price of southern oak and the very low price to which the elm had sunk show that it only takes time to level prices and that one wood cannot long maintain a very great lead over another of a like nature.

The president accounted for the present situation by the fact that last year's output of logs in the North was about twenty-five per cent less than the previous year's supply, and that excessive rains and water in the South curtailed the output there to a large extent, and further that rather active borrowing on the part of the consuming trade led to the investment of considerable money in the expansion of business.

In speaking of the national political situation, President Sill stated that the national administration has had its effect on business. He stated that we cannot avert and must not discount political influence on business, but that the manufacturer, dealer and consumer can do a great deal to so regulate the supply and demand that the fat and lean periods will give way to a more even and regular trade, eliminating excessive fluctuation such as we have experienced in the last few years, which has been mostly to the detriment of all concerned. He expressed himself as hopeful that the manufacturer of lumber will be wise enough to produce only in moderation and on the basis of the normal demand, and that the consumer in turn will manufacture only for ready sale.

Increased ease of adjusting differences with outside concerns has been noted from year to year, owing to the marvelous growth of association work.

Letters were read from Frank F. Fish, secretary of the National Hardwood Lumber Association, and from C. H. Barnaby of Indianapolis, president of that body; also from O. O. Agler of Chicago, former president of the National Association.

Secretary Hayden said in his report that the record of the last year does not show so much the things that have been accomplished, but that this did not indicate any stagnation in the association's work. Four meetings were held during the year and at each meeting the market conditions were discussed. The secretary stated that at one time a government official had endeavored to pump him for information as to the character of subjects talked over at the meetings.

Secretary Hayden said that at last year's meeting he volunteered to get the credit standing of all prospective customers and that he would investigate at anyone's request the practice of such customers in dealing with the rest. He said, however, that judging from the inquiries he had received, members of the association had had very little difficulty with customers.

Treasurer C. F. Osborne reported a balance a year ago of \$30.54, receipts during the year of \$104.50, disbursements of \$99.40—leaving a balance on hand of \$39.64.

The board of arbitration then reported through its chairman, P. R. Hamilton, who stated that that board had received but one complaint—namely, that of a buyer of hardwood lumber in Minneapolis who desired national inspection on some lumber which he had purchased from a concern not a member of the Northwestern association. The request was referred to the secretary of the National Hardwood Lumber Association.

The addition of five new members was reported by Chairman A. H. Barnard of the membership committee. D. F. Clark, reporting for the forestry committee, told of progress which has been made toward creating a new state forestry organization for Minnesota.

The report of A. S. Bliss, chairman of the railroad committee, showed no business during the year. Mr. Bliss suggested that the association notify the Civic and Commercial Association of Minneapolis that the railway committee stood ready to co-operate with it at any time.

Upon motion of P. R. Hamilton, it was decided to send a letter to the National Hardwood Lumber Association declaring that the present rules of that organization are satisfactory. The motion, however, it was understood, is not to oppose changes which might be effected by the rules committee.

A. H. Barnard, E. H. Broughton and F. H. Lewis were appointed as nominating committee and recommended the following officers: President, F. A. Nolan, St. Paul; vice-president, A. S. Bliss, Minneapolis; secretary, J. F. Hayden, Minneapolis; treasurer, O. F. Osborne, Minneapolis; board of arbitration, P. R. Hamilton, E. H. Broughton, N. C. Bennett, P. M. Parker and D. R. Stanton. Following an informal talk by A. S. Bliss in the absence

of the new president, the meeting adjourned to the banquet hall, where dinner was served, preceding a theatre party.



W. H. SILL, MINNEAPOLIS, MINN., RETIRING PRESIDENT NORTHWESTERN HARDWOOD LUMBERMEN'S ASSOCIATION

Poplar in France

Cottonwood for a long time was considered almost worthless, but the demand for box material brought it into extensive use. In fact, it is no longer an inexpensive wood, and the trade is looking for cheaper substitutes. Owing to the large dimensions it attains, the clearness and uniformity of the wood, combined with lightness and toughness, it is peculiarly fitted for many important purposes. Cottonwood is one of the most rapid growers of our forests and reaches merchantable proportion in twenty-five years, or even less. In France, poplar which corresponds to our cottonwood, ranks second only to oak in importance of native timbers. The annual wood product of poplar is valued at six million dollars. Paris alone consumes about seven million cubic feet. It is there, as here, one of the few trees which he who plants it can harvest, and its extended propagation is being strongly recommended. Plantations are best started from one-year-old seedlings. A height growth of five feet the first year after transplanting is very common.



The Problem of Forest Utilization



Editor's Note

The following article was read by Nelson C. Brown, of the New York State College of Forestry, before a recent convention in that state. It is not valuable so much for any specific recommendations for forest utilization that it might contain as it is for a summary of the possibilities of utilization in this country in the future.

It has been estimated that in this country only about forty per cent of all the wood that is produced is actually consumed in a legitimate way. Contrasted to this it has been estimated that ninety-six per cent of all the wood that is produced in some countries of Europe as in Germany and France is utilized. In Europe, even the twigs and leaves are used for kindling and all the branches and waste material are utilized in some profitable way. It will be some time before we can practice such intensive utilization in this country, yet with the rapid depletion of our forest resources, the rise in stumpage and wood values will eventually make possible the close utilization that is practiced in Europe. The fact that only forty per cent of all the wood that is produced in this country is used may be attributed to two broad reasons, first of which is the common prevalence of forest fires which are so well known that they hardly need further discussion here. Suffice it to say that forest fires destroy as much timber, valued in dollars and cents, as is ultimately used on the markets. Fire protection is not directly associated with wood utilization but efficient fire protection means closer utilization and therefore better conservation and profits to the timber owners. The second reason for the wide discrepancy between what is grown and actually utilized is the tremendous waste both in the woods and in the mill.

The practice of forestry in this country will be devoted as much toward securing a closer and more complete utilization of our timber resources as in growing new timber. The subject of forestry may be broadly divided into two branches:—those of production and consumption. Under production we have the planting and growing of new timber; under consumption the utilization of what is already grown. In this country we originally had greater forest resources than in any other country in the world, both in variety and size of timber. One of the greatest problems in forestry therefore will be to utilize these virgin stands in the most complete and profitable manner until it becomes necessary to raise timber on a broad scale. With the rise in stumpage values as a result of the rapid depletion of our forest resources the question of utilization has been brought keenly to the front, in fact, many of the profits of our mills are being made from the utilization of the bi-products as well as from the main product. An analogous case is found in the meat packing industry in which it is said that the principle profits are derived from the bi-products of the packing industry rather than from the meat that is dressed and shipped to all parts of the world. Along with the closer utilization that has been forced upon us we have come to see species that were formerly considered of little or no value. Today we are using hemlock, red gum, tupelo and a great variety of other species which were considered hardly of any value except for the rougher classes of timber twenty years ago. In the pulp industry our spruce supplies are becoming so short that we are compelled to use other species. Experiments are now being carried on by the Forest Service which will probably make available for the paper industry nearly every one of our common species, at least, for the rougher forms of paper.

Opponents of the conservation policy have insisted that substitutes are coming in so rapidly for our wood supplies that in a short time we will need but very little timber. The best argument against this is that in spite of the increased use of iron, steel, concrete, brick, etc., the annual consumption per capita of wood is increasing in rapid strides from year to year. We are today using practically twice as much timber per capita as we did fifty years ago. We are using over five times as much timber per capita as is used in Germany. Even in Germany with its continued practice of forestry for over three hundred years, they still have to rely upon outside sources for a portion of their wood supplies, and they are planting up land formerly used for agriculture to supply the great

and increasing demand for timber in the years to come.

The problem of forest utilization, therefore, is and will be the most important one in forest conservation until the present standing timber is all cut. Up to that time our stumpage values and lumber prices on the market will gradually increase. The question naturally arises how utilization may be increased. In the woods, utilization may be increased by the cutting of low stumps and by the use of small logs from the tops as well as by taking everything that is merchantable out of the woods. On the national forests in the West they commonly make a practice of taking everything down to twenty-five per cent of merchantability. That is, a log that contains seventy-five per cent of defective or worthless material is hauled to the mill and utilized.

Waste is also occasioned by leaving good logs scattered here and there in the woods or covered up by brush and carelessly neglected. Other careful methods may be adopted in the woods such as the use of inferior or knotty logs for skids, corduroys, bridges, camps, etc., instead of the better class of material. In the mill, however, is where intensive utilization may be practiced ever more than in the woods. It has been estimated that only forty per cent of the wood that is cut in the woods actually finds its way into the hands of the ultimate consumer. We now use the thin band saws instead of the circular saws. The waste in sawdust alone is from two per cent to ten per cent of the total amount of wood in the log depending upon the method of sawing and the kind of saw used. Besides the ordinary productions of the sawmill such as lumber, shingles, and lath, special lines of utilization of bi-products are being developed such as the use of slabs and defective logs for box lumber, crating material, etc. The use of sawdust and other waste for wood-pulp and the use of sawdust and shavings especially that from kiln-dried lumber, for special packing material as well as for use in ice houses, etc., is rapidly being adopted. Wood distillation plants are also being maintained in connection with sawmills. We are now getting products from wood material through processes of distillation that were not heard of thirty years ago. One sawmill in the South is producing sufficient wood gas from the distillation of wood to run its entire lighting system. Some of these problems are mere suggestions for the future yet they are strong possibilities and may be developed for the further utilization of timber products with the resultant conservation of timber supplies.

The first work that has been attempted in New York state to take stock of our timber resources and to find out how we stand in the matter of wood utilization has been undertaken by the New York State College of Forestry at Syracuse University in co-operation with the United States Forest Service during the current fall and past summer. There have been from three to five men continually in the field making a close investigation of the amount of wood being consumed in the minor wood using industries of the state. This does not include the amount of lumber produced by the sawmills of the state nor the amount of pulp-wood being consumed by our paper mills, as well as the statistics of wood distillation, veneers, cooperage, etc., which are covered by the government census bureau. However, the report is intended to be an exhaustive study of the amount of wood being consumed in every wood using industry besides the above mentioned ones. It includes such industries as the box board, carriage, furniture, implement industries and every other woodworking establishment that uses wood, in any form or manner. The report will show the average price per thousand board feet for each species that is being paid in each line of utilization, and it will show how much of each species has been produced in New York or in other parts of the country. The main value of the report is in the fact that owners of timberland may determine just what they may expect from their timber hold-

ings as it gives the price being paid for the different species of wood in each industry as well as a directory of the names of all wood-using industries in the state. It is expected that some very interesting information will be given in this report; it will certainly show that millions of dollars are being invested in the state for products produced in other states of the country or Canada; it

will also show that we may substitute our own home grown material for goods imported from other parts of the country. Southern yellow pine and even western fir and southern hardwoods are successfully competing with timber grown in the state whereas over 1,000,000 acres of potential forest land should be producing the entire demand for timber supplies in the state.



The Mail Bag



Any reader of **HARDWOOD RECORD** desiring to communicate with any of the inquirers listed in this section can have the addresses on written request to the Mail Bag Department, **HARDWOOD RECORD**, 537 South Dearborn Street, Chicago, and referring to the number at the head of each letter and enclosing a self-addressed stamped envelope.

B 356—Wants Rim Strips and Sleigh Runner Billets

WOODSTOCK, ONT., CAN., Nov. 29. Editor **HARDWOOD RECORD**: Will you kindly give us the names and addresses of any parties who furnish white oak rim strips and sleigh runner billets?

The above inquirer has been furnished with a partial list of manufacturers of the stock sought.—EDITOR.

B 357—Wants Saw for Cutting Plugs

BERWICK, LA., Nov. 25. Editor **HARDWOOD RECORD**: We would like to get a tool for cutting plugs from one inch cypress boards. These plugs are straight, have no taper like those of a bung. Would be pleased if you would give us some information with reference to this.

COMPANY.

The above concern has been put in touch with a few manufacturers making a saw for cutting out straight plugs, which are very much in the nature of a stave saw.—EDITOR.

B 358—Wants Dimension Stock

LOUISVILLE, KY., Nov. 25.—Editor **HARDWOOD RECORD**: A friend of mine is planning to start a large wood-consuming plant, and is desirous of securing a list of manufacturers of kiln-dried dimension stock, as at the start he intends to buy all of his lumber cut to size. The kinds of woods to be bought include oak, plain and quartered; poplar, beech, chestnut and gum.

If you can send me a list of the principal producers of these woods in sizes, I shall be greatly indebted.

The above party has been supplied with the names of a few manufacturers of dimension stock of the woods mentioned.—EDITOR.

B 359—Wants Tool for Removing Knots

ATLANTA, GA., Nov. 30.—Editor **HARDWOOD RECORD**: We remember some months ago reading that a tool or machine had been perfected and was being used on the Pacific coast, where knots were objectionable in boxes, which cut out the knot and also cut a round plug of clear wood which would perfectly fill the hole.

If you can help us out with any information we would be glad to hear from you.

This concern has been supplied with the names and addresses of a few saw manufacturers who make stave saws, and would undoubtedly be in a position to furnish the tool required.—EDITOR.

B 360—Wants Red Gum Veneers and Poplar Casings

CINCINNATI, O., Dec. 4.—Editor **HARDWOOD RECORD**: We should like to hear from any firms

in a position to supply poplar electric casings, and also from any firms in a position to supply red gum veneers. If you have a list of such firms, we shall be glad to have you send it to us.

The above inquirer has been supplied with the names of several manufacturers of red gum veneers and poplar lumber.—EDITOR.

B 361—Seeks Market for Basswood Mouldings

NEW LONDON, WIS., Nov. 25. Editor **HARDWOOD RECORD**: Can you give us the addresses of two or three wholesalers or buyers of basswood mouldings? The market for basswood mouldings seems to have been discontinued in a great many parts of the country, and if you have a line on anyone using it, we will appreciate the information, as we have considerable of this stock for sale.

COMPANY.

The above manufacturer has been supplied with the names and addresses of a few possible buyers of the material referred to.—EDITOR.

B 362—Seeks Mill Connections

BOSTON, MASS., Nov. 26. Editor **HARDWOOD RECORD**: We are very anxious indeed to make connection with some first-class concern cutting principally oak, ash and chestnut, and write to ask if you know of any good concern with whom you think it might be possible for us to make a similar arrangement to what we had with an eastern concern, which is now practically cut out, for the sale of its stock in the territory which we cover. We want nothing but fine stock, something that will stand right up to grade and well-manufactured, and we would not care to tie up with anyone except a first-class concern in every way.

If you have any such concern in mind with whom you think it would be possible for us to do anything, we wish you would advise, and the writer would be very glad, indeed, to go and see them. We could probably handle five or six million feet or more of this class of stock annually, and could, we think, furnish them with some very desirable business.

The above inquirer is a well-known wholesaler and any millmen contemplating making a connection for the sale of his product, would do well to communicate with this concern.—EDITOR.

B 362—Regarding Arkansas Timber

FRONT ROYAL, VA., Nov. 23.—Editor **HARDWOOD RECORD**: Will you be kind enough to inform us as to the hardwood timber situation in Arkansas, particularly in the section of Hope, Ark.? We are interested in hickory principally for axe, pick, sledge, etc., handles. Is there a good supply to be had within a reasonable shipping distance of Hope, Ark., say within radius of 150 miles? What grade is timber in that section; is it likely to be sound or defective; is it virgin growth, that is, trees of good size, or has it been cut over? What is hickory stumpage worth per thousand or per cord? We shall appreciate your advice on this subject very much.

The above inquirer has been advised that we are not able to quote prices on hickory stumpage in Arkansas, as prices depend largely upon the quality of the timber and location. However, Arkansas has only a small amount of second-growth timber of any kind, the timber there being practically all virgin stand. He has been further informed that the United States Forest Service issued a report this year on the forests of Arkansas, which he can procure by writing the Forest Service, Washington, D. C., and asking for Bulletin 106. Also, that he might ask the Service for two bulletins on hickory, one written by Boisen and the other by Hatch, which contain pretty full information regarding supplies, prices, etc.—EDITOR.

B 364—Fuel Value of Woods

BOSTON, MASS., Nov. 26. Editor **HARDWOOD RECORD**: I should like to know why old railroad ties are not used for fuel, and I should like a complete tabulation of the fuel value of every kind of wood, if such a thing exists. I am getting material together for a handbook of the trees of Boston and vicinity, and in this I want something that will appeal to the man who uses open fires.

The writer of the above letter has been advised that we do not believe he would care to have a list of the fuel values of different kinds of wood figured on a scientific basis, as the method of figuring these values is very complicated and is figured, we believe, on the basis of British thermal units. Fuel value of woods on a practical basis is purely comparative and is based on the weight. For instance, one wood weighing forty pounds would have four-fifths of the fuel value of a wood weighing fifty pounds. There is no government bulletin covering this information, but Dr. Sargent, in the ninth volume of the tenth census of forest trees of North America, gives comparative fuel values of this character. Further, if he desires to go into the scientific calculation, we can probably inform him as to the method of figuring.

The question of using old railroad ties for fuel has been brought up by conservationists a great many times, and, in fact, ardent but impractical men who have been more enthusiastic than in touch with the practical side of the question have protested vigorously against so-called waste of old railroad ties. However, this waste is based upon business calculation by the railroad. It is certainly not logical to suppose that if they could see any return from converting this material into firewood they would overlook the opportunity. They have demonstrated, however, to their own satisfaction that they would actually lose money by splitting and sawing this wood into fuel lengths and hauling it to the market. They find it cheaper to burn it along their rights of way.—EDITOR.



News Miscellany



Annual Meeting of Baltimore Exchange

The annual meeting of the Baltimore Lumber Exchange, which was held at Merchants' Club Dec. 2, was more largely attended than any similar event in years, and the proceedings were of a character to promote good feeling and stimulate the interest felt in the work of the exchange. The meeting followed the monthly session of the managing committee in the afternoon, when the preliminaries were disposed of, and it opened with the reading of the yearly reports by President Theodore Mottu, Treasurer Luther H. Gwaltney, Chief Inspector J. G. Creamer and others. The statement of President Mottu was in the nature of a general review of lumber trade conditions, and he also made some valuable suggestions. He outlined the trade conditions at the beginning of the year and referred to the troubles with which the mills had to contend at the beginning in the early months, the result of these conditions being to greatly retard production. These impediments, he stated, still continued, the car shortage being attributed in large part to the bountiful cotton and other crops, which interfered with the movement of lumber. Continuing, he said:

"The export trade of our city has also been in a very unsettled state. In the early part of the year there was a good demand for lumber and logs in all markets of the United Kingdom and the Continent, which made a considerable amount of business on a profitable basis. Owing to the strike of the stavedores in the early spring the export trade received a severe setback, and shippers accumulated lumber and logs. The steamship companies being unable to manage the situation, much of our exports were diverted to Philadelphia and New York, but this caused an increased cost by the advance in the inland as well as ocean rate of freight, and the loss had to be borne by the shippers. Since the lull in August and September there has been an increased demand, and owing to the difficulties in getting shipments forwarded, prices have advanced, and in all foreign markets there is now a strong demand for all classes of lumber and logs. A good trade is anticipated for the next year, but there are considerable troubles to be overcome, as the steamship companies have recently advanced their ocean rates ranging from twenty-five to eighty per cent, and this serious advance in the cost of export lumber has now to be considered in making sales. The foreign buyer is not quick to pay the advanced price to cover this extra cost, as he believes there will be a great amount of lumber that will find its way into the foreign markets, but it is the hope of the exporters that the domestic trade will continue to increase, and thereby provide for a large consumption of the lumber manufactured."

Mr. Mottu complimented the work of the inspection bureau and commended it to the membership. He also discussed the method of counting in vogue here, which had given rise to some criticism, being different than that used elsewhere. On this subject he said:

"We are trading today on an actual contents count in practically everything that we use with the exception of lumber on the wharf. Our own wholesale members are shipping to Baltimore by car the same sizes that are received on the wharf and making their invoices entirely different. I feel, therefore, that we should not continue in this way because it is easy and has been in existence for so many years, but make the change now and let our exchange be in line with other cities in progressive, up to date methods."

Secretary L. H. Gwaltney stated in his re-

port that the finances of the exchange were in excellent condition and that the past year had been very satisfactory in so far as the work of his office showed it.

Chief Inspector Creamer, in his report, placed the total quantity of lumber inspected at 79,218,981 feet, a quantity slightly smaller than last year, the difference being on account of several firms which had substituted their own inspection for that of the exchange. The volume of business done here was in excess of 1911. The report, of course, did not take account of the vast volume of business done by Baltimore firms and corporations which does not go through the local inspection bureau. Accurate statistics about this trade are lacking, and their compilation has been so difficult and attended with so many obstacles that even President Mottu abandoned the task. The hardwoods inspected were divided as follows: Gum, 3,747,256 feet; poplar, 2,163,515 feet; oak, 1,678,454; chestnut, 454,717; ash, 381,931; maple, 364,390; beech, 147,558; birch, 144,568; juniper, 71,477; bass, 109,006; hickory, 33,106; mahogany, 26,311, and walnut, 7,555.

The adoption of a change in the constitution making out-of-town firms and corporations eligible to membership was almost the only other business transacted, with the exception of the election of officers, which resulted in the secretary being instructed to cast the vote for the ticket named by the nominating committee, as follows:

PRESIDENT—Theodore Mottu.

VICE-PRESIDENT—Ridgeway Merryman.

TREASURER—Luther H. Gwaltney.

MANAGING COMMITTEE—William M. Borgan, Lewis Dill, Parker D. Dix, Edward P. Gill, Rufus K. Goodenow, Henry C. Matthews, John L. Alcock, John H. Geis, George E. Waters, Joseph D. Virdin, Ridgeway Merryman and George B. Hunting.

On adjournment of the business session the members proceeded to the hall on the first floor, where caviar and liquid refreshments had been provided, and where an opportunity was afforded of taking an appetizer and getting acquainted, in which respects the gathering was highly successful.

Nearly one hundred were present, practically all of the membership in the exchange being represented, and the occasion was voted one of the most successful ever held. The arrangements were made by the house committee, which consists of George E. Waters, chairman; Joseph D. Virdin and Henry C. Matthews.

Meeting of Cincinnati Lumbermen's Club

The regular monthly meeting of the Lumbermen's Club was held at the Business Men's Club on Dec. 2. The usual toothsome banquet was provided by the entertainment committee. Following the dinner the meeting was called to order by President Chas. F. Shiels. After the reading of the minutes, followed a discussion of a rate question that had been put up to the club for consideration, originating at St. Louis among some ex-railway men who are now making a study of rates in several sections. Printed copies of the brief had been previously furnished the members of the club and therefore they were well acquainted with the alleged discriminations and comparisons shown. The discussion was very thorough and was participated in by most of the members present, bringing out the consensus of opinion that there was nothing to be gained by a motion to take the matter up with the railroads interested as most of the statements made as to discrimination against Cincinnati were based upon a mileage basis and a comparison of Cincinnati rates with those at

Cairo. The communication was ordered filed.

The question of reconsignment in transit was the matter next discussed. This subject was brought up by Dwight Hinckley, who contended that some of the roads entering Cincinnati were permitting the protection of through rates when cars are reconsigned while others were not doing so, and urged that concerted effort be made by the club to gain this favor from all of the roads. The chair appointed a committee, consisting of Dwight Hinckley, Harry Fagin, C. H. Clark and H. J. Pfeister, to take up the matter and report at the next meeting of the club.

A communication which had been prepared by Ben Dulweber of the John Dulweber Company was then read, stating that he is informed of a contemplated advance by the Illinois Central and the Southern Railway in freight rates from Mississippi points to Ohio river crossings and all points north of the river. While the tariffs increasing these rates have not as yet been filed, it is the intention to cancel present rates on cottonwood and gum, placing these woods on the same basis with other hardwoods, which would increase those rates three and four cents on gum and cottonwood and one cent also on other lumber, being a general advance on all stock. After a general discussion that brought out the fact that the Memphis Lumbermen's Club was about to take some action to prevent this increase of rates, a committee consisting of George Hand, chairman, Ben Dulweber and E. J. Thoman was appointed to investigate the matter thoroughly and to co-operate with the Memphis Lumbermen's Club or with the traffic department of the Cincinnati Chamber of Commerce and to draw on the club treasury for any necessary expenses. After the traffic manager of the Chamber of Commerce, Guy M. Freer, had been heard on the question of rates, the meeting adjourned.

Indiana Hardwood Association Meeting

At a meeting of the board of managers of the Indiana Hardwood Lumber Association on Nov. 27, the date of the next annual meeting of that organization was set for Jan. 16, 1913. The meeting will take place at the Hotel Claypool in Indianapolis. It is planned to make the gathering a sort of homecoming for all Indiana lumbermen and a gratifying attendance is expected.

Coming Meeting of the Hardwood Exporters

The coming meeting of the National Lumber Exporters' Association is scheduled for Jan. 23 and 24 at Chattanooga, Tenn. It is expected that fifty prominent exporters will be in attendance, coming from all parts of the country. Inasmuch as this organization controls seventy-five per cent of the total export business of the country, the importance of these meetings is well-known. The Chattanooga lumber trade is extremely well pleased with the decision of the association to hold its meeting in that city, and Fred Arn of the J. M. Card Lumber Company, who is chairman of the local committee on arrangements, is already getting busy making preparations for the event.

Evansville Lumbermen's Club to Meet

President D. B. McLaren of the Evansville Lumbermen's Club of Evansville, Ind., announces that the next monthly meeting of that body will take place at the New Vendome Hotel on Dec. 10. The most important question up for discussion will be that of the new log rate proposed by the Louisville and Nashville Road. The newly elected officers will not start their terms until the January meeting.

Board Meeting National Wholesalers

The board of trustees of the National Wholesale Lumber Dealers' Association will get together at the association headquarters, 66 Broadway, New York, on Dec. 19, in response to a call of F. E. Parker of Saginaw, Mich.

The executive committee will meet the preced-

ing day and in view of the important questions coming up for discussion, it is anticipated that there will be a full attendance. It is further anticipated that the trustees will name the date and place of the next annual meeting. The work of the past year will be reviewed, and questions to come up at the next meeting will also receive consideration.

Hardwood Manufacturers' Annual

There has been a change in the office force of the Hardwood Manufacturers' Association of the United States. H. G. Hoover, who during this year left the Griffen H. Deeves Lumber Company of Chicago, Ill., to become assistant secretary, has resigned. Mr. Hoover is now associated with the new lumber firm, The Stratemeyer Lumber Company, and will devote his time to the office and selling end of the business.

The association will again hold its annual convention at Cincinnati at Hotel Sinton. This will be the eleventh annual convention and the fourth consecutive year that it has been held at Cincinnati. W. E. DeLaney, president of the association, is determined to make this the biggest gathering of lumber manufacturers ever held, and no pains or expense are to be spared to achieve that end. It is expected that the registration will be close to one thousand and a good program will be arranged for the entertainment of the delegates. The convention will last only two days—Feb. 4 and 5—but the day previous to the convention will be a busy one, as all of the prominent members will be on hand a day ahead and will be busy in committee meetings so that no time will be lost when the meeting convenes.

"Doings" at Chicago Club

On Saturday, Nov. 30, the Lumbermen's Club of Chicago pulled off one of its surpassing entertainments, the feature of which was the Dearborn Chorus. This chorus is famous in semi-professional musical circles and is composed of twenty well-trained male voices, who have established an enviable reputation for their ability to produce harmony of the most harmonious kind. These entertainments are becoming decided features in the Chicago club, and are calling forth a fair response from the members. It is to be hoped, however, that the members will more strikingly show their appreciation at future entertainments.

The entertainment committee is now working on a glee club entertainment which will be given strictly by club talent. The committee in charge, composed of W. A. Eager, Robert Sullivan and F. B. McMullen is holding regular rehearsals, which take place every Friday in the club rooms at 8:30 p. m. They are anxious to secure as many voices as possible from among the members.

Statement of Manufacturing Lumbermen's Underwriters

The last annual statement of the Manufacturing Lumbermen's Underwriters, Harry Rankin & Co., attorney, Kansas City, Mo., shows that organization to be in a decidedly healthy and growing condition. The company was organized with eleven members Nov. 1, 1898. The membership shown in the last statement was 318 and the present membership is 359. The insurance in force Nov. 1, 1911, was \$25,265,525, and on Nov. 1, 1912, it was \$27,535,778. The aggregate of the number of small losses reported after the issuance of the last statement amounted to \$249,178.39. Losses in process of adjustment at time of statement were \$35,559.75. Total losses paid since the organization of the company aggregate \$2,242,505.44.

Lamb-Fish Representative at Rochester

The Lamb-Fish Lumber Company of Charleston, Miss., announces that its representative, Clyde E. Jones, is now located at Rochester, N. Y., where he will maintain his headquarters for

three or four months. Mr. Jones will work the eastern territory with the express purpose of pushing red gum lumber. The Lamb-Fish company expresses itself as quite confident that there is a good field in the East for placing a considerable quantity of this stuff.

New Memphis Concern

W. L. Crenshaw, formerly a partner and later member of the firm of Crenshaw & Cathey, and later president of the Bellgrade Lumber Company, has, with F. E. Gary, general manager of the Baker Lumber Company, purchased the sawmill, timberland holdings and lumber stock of the Norton Hardwood Lumber Company, at Ritchie, Miss. The consideration is understood to have been \$75,000 and the new owners have formed the Crenshaw-Gary Lumber Company, Inc., which is capitalized at \$500,000. The new company has already assumed control of the properties and is operating the mill at Ritchie. It is in charge of E. M. Schulte, who is experienced in that line, having been formerly connected with the J. W. Thompson Lumber Company and later with the Penrod-Abbott interests.



W. L. CRENSHAW, CRENSHAW-GARY LUMBER COMPANY, RITCHIE, MISS.

Seven thousand acres of timberlands were included in the transfer. Mr. Crenshaw has had no active connection with the lumber business for the past few months, aside from his service as president of the Memphis Hardwood Flooring Company. Mr. Gary will continue as manager of the Baker Lumber Company and his relations with the new firm will not affect in any way those with the company of which he has been general manager for a number of years.

New Arkansas Veneer Company

The American Veneer and Specialty Company is the style of a new concern which has recently started business at Newport, Ark. This concern is well equipped as to plant and capital and it expects to manufacture an extensive line of gum, cottonwood and tupelo veneers. A portion of this stock will be made into specialties such as basket stock, box shooks, excelsior, etc.

Forrest City Company Loses Case

In the latter part of 1910 G. M. Sims of Memphis, Tenn., and Proctor, Ark., contracted with the Forrest City Box Company of Forrest City, Ark., for 5,000,000 feet of log run gum, 24 inches and up wide and guaranteed thirty-five per cent red. The price was \$13 f. o. b. Proctor. The Forrest City company accepted 1,500,000 feet of the order but in May, 1911, refused to accept the remainder. After attempting ad-

justment of the difficulty, Mr. Sims took the case to court. On Nov. 22, a decision was rendered at Little Rock, the unique point in which was that settlement must be made for damages to the extent of the difference between the cost of raw material (logs) plus the cost of production, and the contract price on material not accepted and paid for.

The complainant proved that the value of the stumpage to him was \$3.50 per M and the cost of logging and milling was \$7.50. Thus the total cost was \$11.00. The decision awarded Mr. Sims \$2 per thousand on the remainder of the contract. This with a judgment on stock accepted made the total award \$8,300.

Incorporation of Clark L. Poole & Co.

Clark L. Poole & Co., Chicago, announce that the former co-partnership composed of Clark L. Poole and Edward C. Cronwall has been incorporated under the same style as the partnership carried. The object of the incorporation is to perpetuate the business in the interest of the company's clients and to strengthen the organization by the admission of several men to the firm as officers and directors. New members of the company will be A. M. Coit, Kenneth D. Steere, Frank R. Barnes, H. C. Barroll, Horace C. Poole, Harold O. Cronwall. All of these gentlemen have either been with the company for several years or closely connected through other companies. D. H. Bitner, H. J. Elliott and R. H. Coit have also been admitted as stockholders.

The management of the incorporation will be under the control of Clark L. Poole and Edward C. Cronwall, whose financial interest in the business is not affected by this change in the form of business organization. The officers now are: Clark L. Poole, president; Edward C. Cronwall, vice-president; R. S. Poole, secretary, and Harry O. Cronwall, treasurer. The other vice-presidents are: H. C. Barroll, A. M. Coit, Kenneth D. Steere, and Frank R. Barnes.

Clark L. Poole & Co. have purchased and sold to their clients about \$60,000,000 of timberlands bonds during the last nine years. During this period they have had no principal or interest defaulted and no loss has ever been sustained in connection with any of the bond issues.

Buys Jackson Plant

It is announced from Jackson, Tenn., that the Tennessee Hardwood Lumber Company of Nashville, Tenn., has purchased the sawmill plant and timber interests of John Rose of Knoxville, Tenn. The consideration involved is \$35,000. The new plant will be operated in connection with the Nashville offices of the Tennessee Hardwood Lumber Company.

Mr. Rose owned several hundred acres of timberland in Crockett county and had just completed a large sawmill near the Birmingham & Western Railroad depot, which road runs through the land in Crockett county. Mr. Rose completed the sale the latter part of November.

National Wholesale Lumber Dealers' Association Represented at Boston Weight Hearing

At a hearing of the Interstate Commerce Commission in connection with its investigation of the alleged irregularities and discrepancies in the weighing of freight, held at Boston, Nov. 25, before Special Examiner Prouty, the National Wholesale Lumber Dealers' Association was represented by its traffic manager, W. S. Phippen, who presented evidence covering some fifty shipments on which incorrect weights had been assessed. The evidence showed that in assessing the weights of these shipments, errors in calculation had been made, weighing figures had been transposed, and the wrong tare weights had been inserted. Several instances were cited where investigation failed to develop that the cars had been actually weighed, notwithstanding the gross, tare and net weight figures had been

inserted on the billing, and other cases showed that the assessed weights were exorbitant when compared with recognized estimates. This evidence tends to show that as a general rule it is as easy for a weigher to make a mistake in inserting the gross weight on a weight certificate, which it is impossible to detect except by means of an estimate, as it is for a weigher to insert the wrong tare or make an error in calculation which can be detected.

Mr. Phippen also gave evidence covering fifty shipments which were loaded on flat and gondola cars equipped with car stakes, and on which no car stake allowance had been made at the time of scaling; this being the allowance obtained as a result of the famous car stake case brought before the Interstate Commerce Commission in 1905 by the National Wholesale Lumber Dealers' Association. A strong argument was made for the uniform allowance of five hundred pounds for car stakes on all flat and gondola cars which are equipped with car stakes, regardless of whether such shipments consist of lumber, timber, logs or any other forest product, said allowance to be made at the time shipment is weighed, and the scale weights, including the allowance, to be shown on freight bills.

Mr. Phippen submitted resolutions as adopted by the joint committees of the National Lumber Manufacturers' Association and the National Wholesale Lumber Dealers' Association in Chicago last March and also at the annual meeting of the latter body in Louisville, Mar. 7, 1912. The resolutions were to the effect that carriers be required to show on the bills of lading the gross, tare and net weights, less allowance for stakes, dunnage, etc., if any, on each car, or furnish a weight certificate—and that in the absence of scale facilities at point of origin, the carriers be required to weigh each car at the nearest scales and forthwith furnish the shipper a certificate showing the gross, tare and net weight of the shipment, less allowance for car stakes, dunnage, etc., if any. Should the consignor or consignee request another scaling, same shall be made at the next weighing point ahead of the car, and if a difference of over one thousand pounds be shown between the first weight and the certificate of said reweight furnished the consignor or consignee, then the weights authorized by the various lumber associations shall be recognized by the carriers in settlement of claims between the shipper and the carrier.

It was further resolved that a joint committee consisting of railroad officials and lumber shippers shall within a reasonable time agree on a schedule of weights to be used between the parties at interest, and that the present weights authorized by the various lumber associations shall govern in the interim.

Belting Company Doubles Capacity

The New York Leather Belting Company has been so successful in marketing its production that it has found it necessary to greatly increase its power plant and other parts of the factory. Power plant has been more than doubled, the heating system enlarged to heat increased space, and many other changes all through the large Brooklyn factory have been made and are now under construction. When finally completed, this will place the company in better position to protect its friends in the way of delivery, especially in very wide belts, which are now being made, contrary to the usual theory that such belts are being replaced by the use of directly connected installations. It was but a short time ago when the lace leather tannery in Brooklyn was compelled to put on material additions to its facilities.

Foreign Market for Wooden Handles

Consular reports on the wooden handle market in Argentina show that there are various kinds of woods imported into that country. Most of the broom handles come from Brazil because they are cheaper than the American handles and

better adapted to the style of broom made there. The end of the stick is square, the balance of the handle being round. Broom handles manufactured in Argentina are three to four feet long and sell for 2.12 to 2.97 cents gold.

In Cienfuegos there are two broom factories, one of which imports 50,000 and the other 20,000 handles annually from New York. No chair-ropes are imported at this place, turned wood products of any importance being handles for mops, hoes, axes, picks, hammers, files, sledges and chisels. All of these articles are imported from the United States.

Austria does not offer a very inviting field for handle makers, as most of the tools used in that country are fitted with roughly finished handles driven into an eye in the upper part of the tool. This is true of hoes, rakes, shovels and forks. Handles there are made of beech and oak.

In the Malaga district of Spain, foreign made handles are not imported. The working classes in that section cut the lengths to suit and turn them exactly to the thickness desired by the individual. The exceedingly small cost compared to that of the imported handle makes the sale of foreign handles in that country practically impossible. In fact, seventy-five per cent of the common tools are shipped without handles.

Building Operations for November

Official building reports from some fifty building centers throughout the country, as compiled by The American Contractor, (Chicago), show an aggregate gain of 8¼ per cent for November as compared with November, 1911; and the past eleven months show a gain of 5½ per cent as compared with the same months of the past year. The building industries enjoyed prosperity last year, and it is gratifying to know that this year promises to be still better. Over one hundred per cent increase for November was scored in the following cities: Atlanta, 199 per cent; Duluth, 251; Indianapolis, 183; Kansas City, 153; Nashville, 309; St. Joseph, 105; Worcester, 194.

Particulars will be found in the following table:

	November, 1912, Cost.	November, 1911, Cost.	Percent Gain, Loss
Akron	\$ 397,980	\$ 209,625	89 ..
Atlanta	1,238,181	416,508	199 ..
Baltimore	668,871	654,383	2 ..
Buffalo	836,000	606,000	37 ..
Cedar Rapids	178,000	208,000	11 ..
Chicago	7,625,000	7,174,000	6 ..
Cincinnati	526,145	554,390	5 ..
Cleveland	1,230,832	1,071,250	14 ..
Columbus	247,978	247,976	2 ..
Denver	318,010	421,300	24 ..
Des Moines	136,915	189,685	27 ..
Detroit	1,548,085	1,376,675	12 ..
Duluth	395,115	112,425	251 ..
Evansville	139,540	91,468	52 ..
Ft. Wayne	165,635	131,155	26 ..
Grand Rapids	240,240	231,623	4 ..
Harrisburg	54,480	80,000	28 ..
Hartford	269,475	367,044	26 ..
Indianapolis	700,085	247,970	183 ..
Kansas City	1,638,905	645,767	153 ..
Los Angeles	2,597,723	1,797,233	44 ..
Louisville	257,530	171,845	49 ..
Manchester	82,801	175,197	28 ..
Memphis	588,505	499,411	17 ..
Milwaukee	1,646,540	991,710	66 ..
Minneapolis	707,645	659,540	7 ..
Nashville	256,958	62,801	309 ..
Newark	706,806	898,964	21 ..
New Haven	322,828	504,245	35 ..
New Orleans	197,980	156,197	26 ..
Norfolk	110,172	131,166	16 ..
Manhattan	9,304,655	9,487,175	1 ..
Brooklyn	2,420,074	2,827,632	14 ..
Bronx	2,013,243	2,186,205	7 ..
New York	13,797,972	14,501,012	4 ..
Oakland	869,432	721,835	20 ..
Omaha	323,600	307,817	5 ..
Patterson	163,982	119,024	12 ..
Philadelphia	1,919,880	1,615,115	18 ..
Pittsburgh	694,329	639,148	8 ..
Portland, Ore.	688,585	2,012,985	65 ..
Rochester	968,503	608,636	58 ..
St. Joseph	92,112	44,915	105 ..
St. Paul	1,092,696	780,650	39 ..
St. Louis	1,079,423	1,011,662	33 ..
Salt Lake City	93,350	666,400	85 ..
San Francisco	1,912,932	1,617,890	18 ..
Seranton	154,260	121,625	26 ..
Seattle	403,310	449,105	10 ..
Shreveport	87,320	64,145	36 ..
Spokane	130,570	167,265	21 ..
Toledo	272,270	197,915	37 ..
Wilkes Barre	101,396	76,986	31 ..
Worcester	739,901	250,792	194 ..
Total	\$51,557,022	\$47,594,485	8½ ..

The Forest Fire Menace

The Forest Service has issued two important publications dealing with the problem of forest fires. They do not cover the same ground, but take up different phases of the question. Bulletin 113, by Daniel W. Adams, forest examiner, bears the title, "Methods and Apparatus for the Prevention and Control of Forest Fires, as Exemplified in the Arkansas National Forest," and bulletin 117, by Fred G. Plummer, geographer of the Forest Service, is entitled, "Forest Fires, Their Causes, Extent and Effects, With a Summary of Recorded Destruction and Loss."

The latter bulletin is historical, and contains much valuable and interesting information of a scientific nature. It is a companion publication to Mr. Plummer's recent bulletin concerning the agency of lightning in starting fires. It is asserted that forest fires have occurred ever since there were forests on the earth, and that geological records of charcoal, far antedating any human history, is not wanting. Evidences of fires many hundreds of years ago in both the East and the West are found in many places. There is said to be geological evidence that all parts of the United States, except the loftiest mountain summits, were once forested; and it is believed that much of the open plain and prairie in the Mississippi valley was bared by fires, probably set by Indians to improve the food supply of birds and beasts, thereby making hunting more profitable.

The total remaining stand of timber of all kinds in the United States is estimated at 2,800 billion board feet; the annual cut for all purposes 100 billion feet; the annual area burned over, 10 million acres. No estimate is given of the total financial loss due to fires, for the reason that records are so incomplete that definite figures for the whole country are not possible. The evident purpose of the bulletin is to deal with facts, and to present to the timber owners of the country all available information which may help them to attack the forest fire problem in an intelligent way.

The other bulletin referred to, that by Mr. Adams, has a much narrower scope, but the work is no less important. The author is not concerned with the history of fires, nor with natural phenomena over wide areas; but he has worked out a plan whereby he believes fires may be controlled more effectively than in the past. The bulletin describes the fire-fighting appliances and the way to use them. He tried them out in the national forests of Arkansas, and success there has led to the belief that similar success will result elsewhere, both on public and private lands.

To begin with, there is a system of watch towers located on mountain peaks, and connected by telephones. During dangerous fire periods, a watchman occupies each tower. Three or four towers will keep watch over many hundreds of square miles of forest and the first smoke by day or the first glare by night is instantly detected. The towers are each equipped with compass and graduated scales of degrees, and with certain other appliances which enable the observers to determine instantly the direction of the fire from two or more towers. Telephone communication enables them to plot the lines on charts already prepared, and the meeting of the lines of direction locates the fire as to range, township, and section. That information is telephoned to headquarters, and in a few minutes the fire fighters are called out and are on their way to the fire, knowing exactly where it is, though it may be many miles distant.

Under the old system one of the principal difficulties has often been to locate a fire. In the clear atmosphere of the western country, a smoke or glare may be seen fifty miles, but it may not look to be ten miles; or it may appear only ten, and be fifty. It has often happened that fire fighters lose a whole day in locating a fire, and when they reach it, it has gained such headway that it cannot be controlled. That

can not happen when the tower system is employed. Fighters within reach of the fire will be sent against it, to keep it in check until those farther away can come up.

Watch towers, with quick triangulation apparatus, are only part of the tools invented by Mr. Adams for controlling fire and tested by him in Arkansas. It would not avail much to reach a fire quickly if no arrangement had been made for extinguishing it. Chemical tanks, mounted on horses, or on men's backs, are carried along, with hose, nozzle, and fire shields; and if the fire has not gained too much headway it can be extinguished by that means, supplemented by the usual methods of beating out the blaze with wet sacks or green boughs. The "fire department," thus mounted on horses, can get over the ground very rapidly, and it can, of course, be used independently of any system of watch towers.

The bulletin discusses fully the ways and means of getting the best service out of the apparatus, and also the matter of training the fire fighters, and organizing auxiliaries to be called out in cases of emergency.

Purchase of Poles for 1911

Preliminary report for 1911 issued by the census bureau shows that the number of poles purchased by telegraph and telephone companies, steam and electric railways and electric light and power companies in the United States was less than for 1910 and 1909 by 452,674 and 320,720 respectively but exceeded the total for 1908 and 1907 by 168,866 and 134,752 respectively. The total reported purchase in 1911 aggregated 3,418,020, of which 70.3 per cent were made by telephone and telegraph companies, 23 per cent by electric railroad, light and power companies, and 6.7 per cent by the steam railroads.

The decrease in the 1911 totals as compared with that for the preceding year was confined entirely to a falling off in purchase by the telephone and telegraph companies and steam railroads. On the other hand, a substantial increase was shown in purchases by electric railroads and electric light and power companies. The decrease in 1911 in purchases as reported by the telegraph and telephone companies was not general, being confined in the main to states in which there was no more than usual activity in the construction of telephone lines during 1910.

During the period of five years covered by the report, the total pole purchase was 17,559,876, of which white cedar contributed 64.2 per cent; chestnut, 17.8 per cent; oak, 5.3 per cent; pine, 4.5 per cent; cypress, 2.4 per cent. These five woods furnished 94.3 per cent of the total, but the tendency has continued to substitute less expensive woods for these five. Other woods used are redwood, osage orange, and locust.

Successful Management of Wood Lots

The New York State College of Forestry at Syracuse University has placed under supervision the first commercial forest devoted entirely to the production of trees as a forest crop. The tract in question is but small, comprising only one hundred fifty acres, but offers exceptional opportunities for investigation. The forestry students made detailed surveys and maps of the tract and have laid it out in separate plots which vary in size from one-eighth of an acre to a full acre. Each sample area is managed according to different methods of forest improvements, some being given frequent thinnings of old and matured trees, others lighter thinnings and more attention to natural growth, while on still others thinning, seeding and replanting will be carried.

The work can have no practical value as far as the supply of sawlogs in the country is concerned for a long time to come at least, but it should serve to establish valuable figures which can be used by farmers possessing wood lots of

small area who desire to manage them for the greatest remuneration possible.

Miscellaneous Notes

The Globe Box Factory, New Orleans, La., was damaged by fire to the extent of \$60,000.

The Kennedy Corporation has been organized at Killingly, Conn., with a capitalization of \$12,000.

The McNatt Coffin Casket Company was incorporated at Vidalia, Ga., with a capital stock of \$25,000.

The Texarkana Casket Company was recently incorporated at Texarkana, Ark., with a capital stock of \$80,000.

The F. Leslie Clark Piano Company has been incorporated at Milwaukee, Wis., with a capital stock of \$20,000.

The Diamond Furniture Company, with a capitalization of \$100,000, has started operations at Statesville, N. C.

It is reported that the Gayoso Lumber Company of Memphis, Tenn., has discontinued its yard at Cairo, Ill.

The American Veneer & Specialty Company has begun operations at Newport, Ark., with a capital stock of \$50,000.

Consolidated Piano Company has been incorporated at Bridgeport, Conn. The company will operate with \$25,000 capital.

The American Veneered Column Company is the name of a concern recently started in Brooklyn, N. Y., with \$10,000 capital.

The Fisher Vehicle, Woodstock and Lumber Company has recently been incorporated at New Madrid, Mo., with a capital of \$5,000.

The Klerner Furniture Company is the style of a new corporation at New Albany, Ind. This company has \$30,000 subscribed capital.

The Avon Furniture Manufacturing Company, Easton, Md., was recently organized with a capital stock of \$50,000 to manufacture tables.

The Riegelsville Manufacturing Company, Riegelsville, Pa., manufacturer of caskets, will rebuild its plant which was destroyed by fire.

The Farmers Handy Wagon Company of Saginaw, Mich., builder of silos, will erect a plant for making silos at Houston, Tex., in the near future.

The Clío Manufacturing Company of Clío, Mich., manufacturer of woodworking novelties, baskets, etc., suffered a \$10,000 loss by fire. The plant will be rebuilt.

The Royan, Dawson & Ryan Manufacturing Company, Dresden, O., was recently incorporated to manufacture baskets, boxes, veneers, etc. The company is capitalized at \$10,000.

The W. H. White Company of Boyne City, Mich., have assumed control of the mill of F. W. Gilchrist at Alpena, Mich., and will operate

as soon as its railroad to Gaylord is completed.

A stock company was formed recently in Indianapolis, Ind., to manufacture an undertaker's camp chair recently invented by George Palmer, a former chair manufacturer. The company includes in its stockholders Rodney H. Brandon, Kenneth McMahon, Archer Jackley and George Palmer.

The Edisto River Lumber company is a recent corporation, with head offices at Manistee, Mich. The capital stock is \$50,000, of which \$30,000 is subscribed in cash and \$20,000 in timber land at Edisto, S. C. The principal stockholders are Howard Cole of St. Louis, Mo., and Andrew Dovel and J. O. Nessen of Manistee.

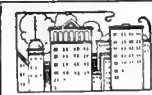
The Knabe Brothers Company, piano manufacturer of Norwood, O., has recently begun operation in its new factory which succeeds the one destroyed by fire. The new plant is thoroughly modern in every respect, one of the chief features being the veneering department, which is equipped with the latest and most efficient machinery for the veneering of piano cases.

The American Veneer Company, Newport, Ark., has purchased the plant of the American Panel & Lumber Company and will improve and operate it, manufacturing elm, walnut and gum veneers, and baskets from sycamore. The officers of the company are: Oscar W. Jacobs, president-treasurer, Kalamazoo, Mich.; Wm. C. Grace, vice-president, and Geo. P. Benton, secretary.

The Sliger-Roettger Lumber and Manufacturing Company has recently started business at Huntington, W. Va., to manufacture, buy and sell lumber, and deal in timber and timberlands. The authorized capital of the new company is \$25,000, and the incorporators are: Walter Sliger, Fred J. Roettger, T. W. Sliger, C. A. Sliger and Everett Roettger, all of Huntington.

The B. A. Stevens Company of Toledo, Ohio, has reduced its capital stock from \$250,000 to \$50,000, in order to eliminate the expense of surplus capital which was not used. The company was organized in 1875 by B. A. Stevens, who died eight years ago. The concern suffered a great loss last July when the factory was almost destroyed by fire. One factory building and the office building was saved and the company has since occupied only these buildings.

It will no doubt be of interest to the lumber trade in general in Ohio, Indiana and Michigan to take notice that H. J. Reinhard has resigned from his position as sales manager of the Midland Lumber Company, Cincinnati, O., and will represent some larger mills in the South on a sales agency basis. Mr. Reinhard's many friends no doubt will be pleased to note this change, inasmuch as he will now be in better position to take care of the volume of business which has always been given to him.



Hardwood News Notes



CHICAGO

H. F. Below of the Vollmar & Below Company, Marshfield, Wis., spent a few days of last week in Chicago.

H. H. Heineman, secretary and treasurer of the Heineman Lumber Company, Heineman, Wis., paid HARDWOOD RECORD an appreciated call on Dec. 3.

M. M. Wall of the Buffalo Hardwood Lumber Company, Buffalo, N. Y., stopped at HARDWOOD RECORD offices on the third of the month.

R. S. Kellogg, secretary of the Northern Hemlock & Hardwood Manufacturers' Association, Wausau, Wis., was in town a few days the past week, and dropped in at HARDWOOD RECORD offices.

James D. Lacey of James D. Lacey & Co., Chicago, recently spent a few days at the New Orleans office, from which place he went to his home on the Hudson river. Mr. Lacey will spend the latter part of the winter in New Orleans.

J. H. Faust of J. H. Faust & Co., Paducah, Ky., was in the city on business several days last week.

F. A. Kirby and Martin Rees of the Cherry River Boom & Lumber Company, Scranton, Pa., spent a couple of days in Chicago the early part of last week.

A beautiful catalogue styled "Clyde's Self-Propelling Logging Machinery" has just been received from the offices of the Clyde Iron Works, Duluth, Minn. The book shows extremely good taste from cover to cover. It is descriptive of that concern's extensive line of logging machinery, and is generously and effectively illustrated.

J. R. McGiffert, secretary and treasurer, and C. A. Luster, president of the Clyde Iron Works, Duluth, Minn., stopped at the HARDWOOD RECORD offices on Dec. 3, during a short visit to the city.

J. W. Thompson of the J. W. Thompson Hardwood Lumber Company, Memphis, Tenn., spent a few days last week in Chicago on a selling trip.

C. P. Crosby of Rhinelander, Wis., was one of the prominent visitors to the local trade recently.

W. E. Cox of the Nichols & Cox Lumber Company, Grand Rapids, Mich., made a short stop at this city the latter part of last week.

R. G. Page of the Licking River Lumber Company, South Bend, Ind., was a recent visitor to this town.

W. D. Reeves of the W. D. Reeves Lumber Company, Helena, Ark., spent most of last week soliciting business in the local market.

W. W. Dings of the Garetson-Greaseon Lumber Company, St. Louis, Mo., made a trip of several days' duration to the local market last week.

J. W. Dickson of the J. W. Dickson Lumber Company, Memphis, Tenn., recently put in a few days with the local trade.

Lewis Doster, secretary of the Hardwood Manufacturers' Association of the United States, Cincinnati, O., spent three days of last week in this city, during which visit he took time to call at HARDWOOD RECORD offices. Mr. Doster is on an extended trip in the interest of his association, and upon leaving Chicago went to Memphis, from which point he will journey to New Orleans and other southern points.

C. M. Clark of the Swann-Day Lumber Company, well-known hardwood manufacturer of Cincinnati, dropped in at this office on Saturday of last week while waiting for a train to take him back to Cincinnati.

C. L. Faust of the Faust Brothers Lumber Company, Paducah, Ky., spent Wednesday, Thursday and Friday of last week consulting with his Chicago manager, J. F. Mingea.

W. E. Barnes of St. Louis, the well-known lumber journalist, was in the city a few days the early part of last week.

The National Piano Bench Company of Chicago has recently increased its capital stock to \$10,000.

NEW YORK

Edward J. Glenn, Brooklyn hardwood dealer, has moved from 583 Kent avenue to 1205 Myrtle avenue, in the Bushwick section, where he has improved and enlarged yard space. Mr. Glenn has been engaged in the hardwood trade in Brooklyn for several years.

Friends of E. L. Sinsabaugh, hardwood and mahogany lumber and veneer manufacturer and wholesaler of Long Island City, are united in expressions of sympathy in the loss of his wife, which occurred last week. Mrs. Sinsabaugh was active in charity work, and was a member of the board of managers of the Congregational Home for the Aged.

Ben C. Currie of Currie & Campbell, Philadelphia hardwood wholesaler, was among recent visitors to the Metropolitan district. He reports satisfactory business in point of inquiry and orders, but finds some difficulty in getting forward shipments, a condition experienced at this time by most lumber shippers. He considers that the future for the lumber trade is bright.

Sam E. Barr, hardwood wholesaler, reports business good and is well pleased with conditions generally. He is getting forward a very good percentage of his lumber, which is rather unusual at this time.

Hugh McLean of the Hugh McLean Lumber Company, Buffalo, was a recent visitor in New York.

A. Allan Dill of the Baltimore lumber firm of Lewis Dill & Co., was in New York recently in the interest of business.

J. M. Hastings of the Davison Lumber Company, Ltd., local office 1 Madison avenue, returned recently from a trip to the company's large operations at Bridgewater, N. S.

BUFFALO

The Standard Hardwood Lumber Company has a large assortment of oak and chestnut at its new Baitz avenue yard. Business is reported fair, but cars are not at all plentiful.

B. E. Darling of Blakeslee, Perrin & Darling, who lately returned from a business trip to the South, found mill stocks much broken in all hardwoods. The yard recently added to its stocks in various woods.

Hugh McLean spent Thanksgiving day in New York City, taking dinner with his son and daughter, who are attending college in neighboring cities. He states that the lumber trade is very fair.

J. B. Wall left early this month for an inspection trip of a number of mills of the Buffalo Hardwood Lumber Company in the South, expecting to be gone several weeks.

Anthony Miller has been receiving a number of hardwood stocks, including birch, cherry, maple and ash. He states that there is a steady, though not unusually brisk, demand for hardwoods.

Miller, Sturm & Miller started in at the former Vetter yard early in December and have lately been taking inventory. They expect to add quite a little to present stocks.

O. E. Yeager was lately in Pittsburgh, where he attended the annual banquet of the Pittsburgh Chamber of Commerce. He reports a fair amount of trade in hardwoods, with the outlook promising.

H. A. Stewart is back from a business trip to Charleston, W. Va., where he found the mills pretty busy and most of them complaining strongly over the present shortage of cars.

F. M. Sullivan has returned from an eastern business trip and reports a pretty good demand for hardwoods. Orders are largely made up of oak, elm and ash at present.

As chairman of the sub-committee of the terminal commission, J. N. Scatterd is active in promoting the interest of that body. It was hoped that the court decision would be favorable, but matters are still in an unsettled condition.

What is said to have been the largest hardwood cargo ever brought to this port reached here on Dec. 2, consigned to the yard of Hamilton H. Salmon & Co., on South street, of which Frank T. Sullivan is manager. The cargo contained 1,677,000 feet of maple. The lumber came from Pequaming, Mich.

The Automobile Club of Buffalo, which is the largest organization of its kind in the world, will hold its annual meeting and election on Dec. 16 and in the evening a smoker will be held at the Broadway Auditorium. Maurice M. Wall has been nominated for president of the club and A. W. Kreinheder for treasurer.

PHILADELPHIA

J. W. Floyd of the Floyd-Olmstead Company continues unperturbed as to trade conditions. Business is good and prices satisfactory. The company has a fair quantity of lumber on hand, but is not forcing it on the market. It recently removed with Charles Atherton & Co., who occupied the same office, from No. 307 Bulletin building to 709 and 11, where it has more commodious quarters.

William P. Shearer of Samuel H. Shearer & Son says there is nothing the matter with business. Prices are all right, only a little inconvenienced by the somewhat low stocks. He is spending considerable time in North and South Carolina looking after desirable contracts.

Norman A. Perry of Robert C. Lippincott re-

ports expanded trading. He says it is easier getting orders than shipping the stock, especially when lumber at mills is sold way ahead.

The machinery of the Penn-Sumter Lumber Company, Sumter, S. C., recently organized by Wistar, Underhill & Nixon, has begun to hum. Its mill has commenced to make lumber, and from present indications a big pile may soon be expected.

Horace A. Reeves, Jr., says things are moving without serious disturbance. Stocks are a little hard to get, but nothing more alarming is apprehended to interfere with smooth business unless prices keep soaring.

J. W. Turnbull Lumber Company, which has outgrown present quarters, is preparing to take offices in the new Stock Exchange building, in the near future. G. C. Burkholder of this house reports excellent trading, and the Bristol Door and Lumber Company, Bristol, Tenn., which it represents, rushed with orders.

William H. Fritz of W. H. Fritz & Co. says orders are multiplying and prices are stiff. As they are handling mainly northern woods they have fortunately had very little trouble with the car shortage.

Howes & Russell state that the Birch River Lumber Company, Birch River, W. Va., which they own, and which is now making lumber, is turning out some excellent stock. The operation is under the able management of Joseph P. Dunwoody.

The planing mill of John Griffie & Co., adjoining the J. B. Van Sciver's extensive furniture factory, Camden, N. J., was destroyed by fire, Nov. 27, causing a loss estimated at \$10,000. The firemen were fortunate in preventing the spread of the flames to the Van Sciver plant.

Moulton H. Davis, lumber dealer, West Chester, Pa., at one time president of the Structural Iron Workers' Union of Philadelphia and who was indicted in connection with the dynamite cases being tried in Indianapolis, has been released, as it was shown that Davis had resigned from the union in 1906.

Frank Crane, one of the best-known men in the New Jersey lumber trade, and senior member of the firm of Crane Bros., Clayton, N. J., died of acute indigestion Nov. 26. He was sixty-two years old.

The Lumbermen's Exchange held its regular monthly meeting preceded by a luncheon on Dec. 5. President William T. Betts presided. Only routine business was transacted. The board of directors has decided to change the next monthly meeting from Jan. 2 to January 9, as the exchange will hold its usual annual social entertainment on Dec. 31.

The Philadelphia Wholesale Lumber Dealers' Association has decided to postpone its regular December monthly meeting until Jan. 9, 1913, when it will hold its annual meeting and banquet.

PITTSBURGH

Isaac Seman of Uniontown, Pa., and others have bought 5,000 acres of timberland in Jefferson township and expect to put in a mill and cut it off shortly. The timber is largely hardwood and will be shipped out over the Baltimore & Ohio.

Fred R. Babcock, of the Babcock Lumber Company was last week elected president of the board of trustees of Grove City College, Grove City, Pa.

The American Lumber & Manufacturing Company has secured Frank B. Clayton as an addition to its sales force. He has been for three years manager of the D. M. Nesbit Box Company at East Lewisburg, Pa.

The Jamestown Panel Company, capital \$75,000, has been incorporated by Frank Morrison, B. E. Strong, Frank Erl, R. Z. Morrison and others of Warren, Pa., to take over the business of the Jamestown Veneer & Panel Company at Jamestown, Pa. The plant will be improved at once.

The DeVoss & Adelman Lumber Company is now represented in Columbus, O., by O. H. Taylor of that city, who will work the Ohio trade. D. H. Younger, Jr., is working the Pittsburgh trade for the company at present. Mr. A. Adelman of this company recently made a very successful buying trip among the southern mills.

The Acorn Lumber Company, one of the most thrifty hardwood concerns in the city, says that politics is having no effect at all on business. President H. F. Demhoff recently said they were quoting high and everybody is buying heavy.

The C. P. Caughey Lumber Company has bought a very nice tract of Washington county white oak and will put in a mill at once to cut off the lumber. It will be shipped over the Pennsylvania railroad and the Baltimore & Ohio.

The Kendall Lumber Company shipped an average of twenty-nine cars of lumber a day in November. It has more orders on its books now than at any time for five years and its mills are rushed.

BOSTON

The Boughton Door Company, Boston, has been incorporated with a capital stock of \$50,000. The incorporators are Fred W. Boughton, Forrest E. Howes and E. Florence Guild.

The J. H. Locket Piano Case Company, Leominster, Mass., J. M. Locket, treasurer, has filed its annual statement, showing total assets as \$128,904, and liabilities \$128,904.

The Hartford Lumber Company, Hartford, Conn., has been incorporated with a capital stock of \$10,000. Leon O. Irish is president and Edgar C. Irish, treasurer, both of Hartford.

Arthur H. Whitcomb, for many years in the lumber business in Vermont, but of late years in business in Boston, died recently at his home in this city.

H. D. Moulton, a lumber dealer, Monson, Mass., dropped dead recently while riding through Webster, Mass., in an electric car. The cause of his death was heart failure.

The E. C. Wright Lumber Company, Brockton, Mass., manufacturer of wood and metal last blocks, has been incorporated with a capital stock of \$25,000. The incorporators are Ellery C. Wright, C. A. Batchelder and F. R. Wright.

The Hills Chair-Couch Manufacturing Company, Boston, has leased a factory in Gardner, Mass., and will occupy the same. The company has taken the factory in that city formerly occupied by the Collier-Keyworth Company.

The Mansfield Lumber Company, Mansfield, Mass., have built a three-story addition to its building.

The Taunton Lumber Company is planning to build additions to its storehouse and office at its branch in Brockton, Mass.

The Lansing Lumber Company, Providence, R. I., is about to erect a two-story building of mill construction on its property in that city. The new building will be 145x150.

BALTIMORE

All of the steamship lines have now sent out contracts for the exporters to sign covering shipments to be made during 1913. All of the contracts call for materially higher rates, and there is more or less holding back on this account, the shippers taking the view that they may be able to do better by contracting as they go along. On oak planks of two inches and over, for instance, the advance from Norfolk to Liverpool has been four cents, to London three and one-half cents. On planks under two inches the raise is five cents to London and seven and one-half cents to Liverpool. The increase on poplar lumber has been about eight and one-half cents to London and Liverpool, with the rates to Hamburg eleven cents up and those to Cardiff increased to twenty-eight cents. The rates for the current year on poplar logs are twenty-three

cents from Norfolk to Liverpool and twenty-one cents to London. The new rates will be thirty-five cents. Of course, this difference does not represent the advance between the general rates for 1912 and those for 1913. Several advances having been made in the course of the year, but it does constitute the rise on contract shipments for 1912 as against 1913, and will make such a difference in the cost of putting down stocks on the other side that there can be no talk of the exporters absorbing the increase.

One of the visiting lumbermen here in the last week was Mr. Howie, of Wright & Graham, Glasgow and London, who came here from New York on the way to South and Southwest to visit mills and exporters, and get a close view of trade conditions in the United States.

A. Temple Dobell, who was in Baltimore about a month or six weeks ago in company with Robert Lyle Dobell, both representing the firm of Alfred Dobell & Co., Liverpool, stopped in Baltimore on the return trip to New York, after visiting the South, to take the steamer Mauretania for home. Robert Dobell remained in Mobile, where he will give special attention to the pitch pine business.

Still another visitor here in the last two weeks was John Bain of Munro, Bryce & Co., London. Like other callers from the United Kingdom, Mr. Bain stopped here in the course of an extended trip to the hardwood producing sections.

CINCINNATI

O. P. Stratemeyer and H. G. Hoover have recently organized the Stratemeyer Lumber Company in this city. Mr. Stratemeyer was formerly vice-president of the Thompson Hardwood Lumber Company, while Mr. Hoover was assistant secretary of the Hardwood Manufacturer's Association of the United States. Previous to this connection Mr. Hoover was with the Griffen H. Deeves Lumber Company of Chicago. Both young lumbermen are hustlers and should make a success of their new venture.

The band mills of Mowbray & Robinson, which are located at Quicksand and Irvine, Ky., are running overtime, much of the cut being special. Fred Mowbray, who recently has spent considerable time at the mill, states that business never was better with them.

One of the busiest yards in town is that of the John Dulweber Company. Ben Dulweber, the active head of the business, is a real hustler and has built up the present big business of the concern in a comparatively short time. Mr. Dulweber is of the opinion that business is normal and will continue without any interruption.

W. J. Eckham of the M. B. Farrin Lumber Company is of the opinion that present trade conditions reflect the good business conditions that prevail all over the country. This company does a very large business and ships to most all of the consuming centers. Its hardwood flooring department is a big feature of its business and the brand of "Century Oak Flooring" is widely known.

Chas. F. Shiels & Co. are doing a fine yard trade. Chas. F. Shiels recently returned from a trip through the producing sections and says that while all hardwoods are scarce, he succeeded in getting out quite a lot of stock that they had bought, and arranged for a good portion of requirements for the next couple of months.

J. C. Rash of the Shawnee Lumber Company, whose mills are located at Shawnee, states that the white pine business is very good and all hardwoods are moving fast at satisfactory prices.

INDIANAPOLIS

Henry R. Bliss, for twenty-five years secretary-treasurer of the Sinker-Davis Company, manufacturer of sawmill machinery, boilers and

engines, died at his home here recently. He was fifty-three years old and was born in Woodport, N. Y. A widow and one son survive him.

The Mahogany Company recently arrived from the coast of West Africa a consignment of 1887 mahogany logs, valued at \$50,000. This is the largest single shipment of its kind that ever passed through the local custom house in the thirty-one years of its existence.

To Dec. 1 the aggregate of building permits issued by the city was \$8,623,302, as compared with \$7,590,059 for the corresponding period of last year. The total amount of permits issued last year was \$8,349,477.

The board of managers of the Indiana Hardwood Lumbermen's Association met here a few days ago to make final plans for the annual meeting of the organization to be held here Dec. 16. Committees on program and entertainment were appointed. The meeting is to be a special home coming for all hardwood lumbermen formerly in business in Indiana.

William White Knight of Indianapolis and Miss Mary Ethlyn Prentice were married at the home of the bride in Leroy, N. Y., on Dec. 2 in the presence of a distinguished gathering of friends and relatives. Immediately after the ceremony they left for Panama. After a visit of several weeks, they will return to Indianapolis for residence and will have apartments in the Buckingham. Mr. Knight is president and treasurer of the Long-Knight Lumber Company. He is prominent in hardwood circles of the Middle West.

MEMPHIS

C. K. Sharp and G. K. Caldwell, Jackson, Tenn., have recently acquired the properties of the Star Lumber & Transportation Company at West Point, Ark. Included in the transfer are a sawmill, a dimension mill and a planer. The new owners have already assumed charge and are now operating these plants. They have likewise acquired control of several hundred acres of hardwood timberland in the adjacent territory, from which they will secure their timber requirements.

Lumbermen here are watching with considerable interest the outcome of the recent importation of about 100,000 feet of African mahogany by a prominent manufacturing firm here. If the first importation turns out well it is certain that the firm in question will bring numerous other imports and it is also intimated that other firms may engage in the same departure. In fact the lumbermen have taken up with J. H. Townsend, manager of the Lumbermen's Traffic Bureau, the question of securing reduced rates on shipments of African mahogany from Mobile to Memphis. It is believed that the railroads may be induced to offer lower rates in order to build up an entirely new industry. The present shipment of mahogany logs is being cut into lumber and veneers.

One of the most prominent producers of hardwood lumber in east Arkansas, who has recently become identified with the Arkansas Lumbermen's Club of Little Rock, is authority for the statement that one of the first steps to be taken by the members of that organization is that of securing lower rates on the lower grades of hardwood lumber. He says that under present rates it is well nigh impossible to ship the lower grades of lumber more than one hundred miles and that, owing to the excessive freight rates, manufacturers of lower grades are meeting with increasing difficulty in disposing of their output and that much accumulation of this class of lumber is the result.

A number of business men from this city and section left Memphis Dec. 2 for Washington, where they have gone to present to the proper committees of the House and Senate the resolutions which were adopted by the Interstate Levee Association last September, asking for an

appropriation of \$25,000,000 for improvement work on the Mississippi levee. Prominent among the Memphis delegation was W. H. Russe of Russe & Burgess, Inc.

The Arkansas Timber & Land Company, which recently acquired a large mill site at Malvern, Ark., is preparing to erect an up-to-date plant at that point. The company is also planning to build a line of railway about seventy-five miles in length to facilitate the movement of its timber from its extensive holdings in Garland and Montgomery counties to Camden. This road is to be standard gauge and will necessitate the construction of a bridge across the Ouachita.

F. B. Robertson, president of the Lumbermen's Club of Memphis, has appointed the following gentlemen to nominate candidates for the presidency and other officers in the gift of that organization: No. 1, C. C. Lattauer, S. M. Nicky and F. W. Dugan; No. 2, D. F. Heuer, W. H. Greble and A. G. Fritchie. These gentlemen will make their reports at the next meeting of the club, and the election will be held two weeks from that date. Nothing will be known as to the identity of the candidates until these committees have made their reports.

H. F. Auten and associates at Helena, Ark., have sold to the Chicago Mill & Lumber Company 7,000 acres of timberland in Phillips county. The tract lies between White and Mississippi rivers and it is estimated that there are fully 60,000,000 feet of oak, gum, ash and hickory on the property. It is understood that the Chicago Mill and Lumber Company, which maintains offices in Memphis, will install a plant in the early future for the development of the timber on this tract. The average price per acre is understood to have been about \$20.00. This is the last large tract of timberland in that part of Arkansas which has not already passed into the hands of some of the big lumber companies.

NASHVILLE

A \$20,000 company is being formed for the purpose of establishing a strawberry crate factory at Dayton, Tenn. Some difficulty has been experienced of late in securing a sufficient number of crates to handle the strawberry trade of this section, hence the plan to establish the proposed factory.

Notwithstanding the recent action taken by some furniture manufacturers looking to a ten per cent advance in the prices of their products to the retail trade, the furniture makers of this city will make no advance just now, at any rate. Prices of material and the cost of production have increased, it is true, and if advances continue along this line an increase to the retail trade may be necessary later.

The sawmill of James Smith near Sango was destroyed by fire recently, the blaze supposedly starting by a spark from the engine room. A temporary shut down for repairs was necessary.

Fire which is supposed to have been started by sparks in some straw accumulated in an upper window casing at the residence of S. Lieberman by birds, caused \$200 damage the other day. Mr. Lieberman is a leading member of the local lumber fraternity.

A good attendance of prominent men from all sections of the country is expected at the coming meeting in Chattanooga, Jan. 23 and 24, of the National Lumber Exporters' Association. J. M. Card of the lumber company bearing his name, has charge of the local arrangements.

The members of the lumber club at Memphis are heartily co-operating with the members of the club here in efforts to secure for this city the next regular session of the National Wholesale Lumber Dealers' Association.

A hearing will be held in St. Louis Dec. 16 by the Interstate Commerce Commission of the application of local lumbermen for a suspension of the proposed advanced freight rates by carriers for the transportation of lumber in carload lots from Nashville north of the Ohio river and to

Canada. T. M. Henderson of the local traffic bureau will represent the Nashville interests at this hearing.

BRISTOL

R. W. Cox of Gate City, Va., who has a mill and yards at Poplar, N. C., lost over 1,000,000 feet of hardwood lumber by fire last week. He carried only \$4,000 insurance on the stock.

Shipments from the Bristol district have been heavy of late, despite the scarcity of stocks and car shortage, according to the managers of the local offices of large eastern and western concerns. Indications are that the scarcity of stocks will continue, as a result of many of the mills having oversold.

The T. W. Thayer Lumber Company is building a large new plant at Damascus, Va. The company lost its plant by fire about a year ago.

A large amount of lumber is being hauled to Bristol from the country mills, as the roads are still in fair condition. The small mills have had a busy year and especially during the fall. A large amount of lumber has been received here in this manner, while many logs are being hauled in to local band mills.

Among the visitors on the Bristol lumber market recently were: J. J. Rumbarger and George M. Speigle of Philadelphia; L. H. Snodgrass, Johnson City, Tenn.; J. H. Barrell, London; P. W. Bevins, Hiltens, Va., and J. Walter Wright, Mountain City, Tenn. They report business brisk and splendid prospects for trade during the remainder of the winter and next spring.

The D. T. McKeithan Lumber Company of Lumber, S. C., is preparing to let the contract for cutting about 20,000 acres of timber in that section. J. Mortimer, Jr., former general superintendent of the W. M. Ritter Lumber Company, is at the head of the company.

Trustee Irving Whaley of the J. A. Wilkinson Lumber Company, Inc., will soon sell at public auction the large planing mill owned by the company. It cost \$70,000.

Price and Pierce, Ltd., London, England, are buying very heavily in this section, through J. A. Wilkinson.

ST. LOUIS

Building operations continue to be fairly good, owing to the very pleasant weather which has prevailed up to the present time, and which makes work possible.

Last month 567 permits for buildings and alterations were issued by the building commissioner, aggregating \$1,079,432. During the corresponding month last year there were only 507 permits issued, but the aggregate cost was \$1,611,662. This shows a falling off of about half a million dollars during the past month.

Receipts of lumber during November were 13,981 cars and 34,000 feet by river. Receipts for November last year were 12,560 cars and 13,000 feet by river. Shipments by rail last month were 9,203 cars and 37,000 feet by river. Shipments during November last year were 9,443 cars and none by river.

The Lumbermen's Exchange intends to co-operate with Memphis and Nashville lumbermen in a fight before the Interstate Commerce Commission against the recent advance in hardwood lumber rates by the railroads from the Ohio river gateways to Canadian points. The lumbermen from the two former cities will be in St. Louis Dec. 16, and will testify before Examiner Prouty at the Jefferson Hotel, Dec. 16 and 17.

The Lumbermen's Exchange will hold its annual meeting and banquet at the Missouri Athletic Club on Dec. 17. The visiting Memphis and Nashville lumbermen witnesses have been invited to attend the banquet. Nominations of officers for the ensuing year will be made. The election will be held early in January.

The two nominating committees of the Lum-

bermen's Club, which were named at the November meeting have selected the names of Thos. C. Whitmarsh for president, R. B. McConnell, first vice president, and C. H. A. Beckers for second vice president. The committee named from the floor has handed in the names of Thos. C. Whitmarsh for president, T. J. Noser for first vice-president and S. J. Gavin for second vice-president. Both committees named E. C. Robinson for treasurer and John B. Kessler for secretary. The friendly fight therefore will be on the offices of first and second vice-president. Mr. Whitmarsh is held in high esteem by the members of the club and there was no opposing candidate considered by the members of the two committees. The same applies to E. C. Robinson and J. B. Kessler. Mr. Whitmarsh is the general manager of the W. T. Ferguson Lumber Company. The election will take place on the evening of Dec. 10 at the Mercantile Club.

MILWAUKEE

A plan has been thought out by State Forester E. M. Griffith by which the state forest reserve will be used for the employment and treatment of convalescent consumptives and "run down city folks." His plan has been indorsed by the Wisconsin Anti-Tuberculosis Association. The manual work in cultivating the forests is out of doors and there are about 1,200 lakes in the forestry area, both of which are very beneficial to the health. Mr. Griffith proposes to have the next legislature pass on this bill.

The death of Emil F. Wollaeger, general manager of the Wollaeger Manufacturing Company of Milwaukee, office furniture, etc., occurred at his home on Nov. 26. Mr. Wollaeger was forty-two years of age. He had charge of the Pittsburgh, Pa., branch of the Wollaeger company for several years, and returned to Milwaukee two years ago, where he has since held the position of manager of the local plant. He is survived by his widow, one brother and two sisters.

The John S. Owen Lumber Company of Eau Claire has started running both day and night shifts with a supply to run through the winter.

A voluntary petition of bankruptcy has been filed by the Plymouth Parlor Frame Company of Plymouth. The liabilities are \$33,576.78, and the assets are \$25,999.19.

The Hardwood Products Company, one of the new industries of Neenah, is having a large warehouse erected to facilitate the manufacture and shipment of its hardwood products.

The Keith & Hiles Lumber Company of Cranston, has started its sawmill after having been closed down while new boilers were being installed.

An employees' benefit disability fund has been planned by the Roddis Lumber & Veneer Company of Marshfield. Each employee will pay \$1 per month to the fund.

The Peshtigo Lumber Company, which sustained a loss of several thousand dollars when its sawmill was destroyed in October, has started operations on the planing mill, which was not damaged to any great extent. Work of clearing the sawmill site has been started and the contract for rebuilding the same will be let in a short time.

Andrew Kaul, Jr., & Co., is installing a new 150 H. P. boiler in connection with its new dry-kiln at its hub plant in Merrill. A dry room for drying veneers is being fitted up on the second floor of the plant.

The big sawmill of the J. S. Stearns Lumber Company at Washburn has been closed following the finishing of its season's cut. The company has several logging camps in operation throughout the northern sections of Wisconsin and Michigan.

The E. J. Pfiffner Company of Stevens Point, has leased the sawmill at Sell's Landing, north of Glidden, which will be supplied from a recently acquired tract of timber together with custom sawing.

The Lee Handle and Dowell Company, which has succeeded the Hankwitz Handle Company at Merrill, will begin operations in a short time. A new wood conveyor is being installed and a machine to make toy broom handles will arrive shortly. Mr. Essler will be retained as superintendent of the plant by the new owner.

The regents of the state university at Madison have decided to open a forestry training school at the university in response to numerous requests from lumbermen. The new department will be opened in January under F. B. Moody of the state board of forestry, and will give instructions and training in range, nursery and timber work. The building for the new department is now partially completed.

Fire caused nearly \$15,000 damage at Oakwood when the yards of Otto Davis burned and spread to the lumber yards of the Tibbitts-Cameron Lumber Company, causing \$10,000 damage to the latter concern. The village has no fire protection and a bucket brigade of 200 citizens did all in their power to check the flames.

Mrs. W. H. Upham, wife of former Gov. W. H. Upham of the Upham Mfg. Company of Marshfield, died at her home on Nov. 29. She is survived by her husband and two daughters.

DETROIT

The Detroit Lumber Company has increased its capital stock from \$150,000 to \$300,000 and the Plymouth Lumber & Coal Company from \$10,000 to \$20,000.

The Thomas Forman Company, the Brownlee-Kelly Company and the Lowrie & Robinson Lumber Company have received the last of their lake shipments of lumber. All have received large cargoes of hardwood lumber, especially maple, within the past fortnight.

Escanaba is to have a new \$75,000 veneer manufacturing plant. J. C. Kirkpatrick, head of the National Pole Company, is the leading spirit in the new enterprise.

Secretary John Lodge of the Dwight Lumber Company reports that the hardwood flooring trade is in an excellent condition. The Dwight company's flooring mill is running overtime trying to keep up with orders. Mr. Lodge says that his company has not been as badly affected by the freight car shortage as some of the other Detroit lumber dealers and ascribes this to the fact that all cars received at his plant are promptly unloaded and are not held overnight. Mr. Lodge reports that this is the best season the Dwight company has had since its organization over thirty years ago.

Samuel Ellsworth has petitioned the Pontiac circuit court for permission to reopen the Michigan Oak Flooring & Interior Finish Company. He claims to own 900 shares of common stock and is the largest individual stockholder. Chauncey A. Harris, the receiver, is in charge and is engaged in winding up the affairs of the plant. Mr. Ellsworth believes that the plant will bring a better figure at a sale as a going concern.

Detroit lumbermen are interested in the report that the Dayton Last Block Works has rented the S. S. Humphrey sawmill at Gaylord and will manufacture hardwood ties during the coming winter. There is still considerable timber of this sort in the section of the country surrounding Gaylord.

"Building conditions have never been better in the history of the city," said Charles A. Bowen, secretary of the Builders & Traders' Exchange. "For example the value of the building permits from the first of the year to the end of November exceeded by over four million dollars those of the year previous for the same time."

Frank A. Black of Detroit is at the head of a new company organized to manufacture plumber's woodwork and sectional bookcases. A plant will be established at Milford.

Thomas J. Anketell of the Anketell Lumber Company will leave about the first of the year

for a southern trip. He expects to be out until way along into the summer.

Frederick J. Robinson of the Lowrie & Robinson Lumber Company says that the hardwood flooring and finishing during the past month has been exceedingly good. Plain red oak, he says, is in great demand.

Oak and cypress have been the leaders with E. W. Leech during the past month. Manager Smith of the company complained of the shortage of freight cars which has resulted in holding up shipments and he says he does not look for much relief in this direction before the first of the year.

J. P. Scranton, the veteran dealer in hardwoods, says that he has orders which cannot be filled for some time on account of the scarcity of men and delayed shipments of stocks. Mr. Scranton says that it is hard to get men because the automobile companies win them away with offers of more pay. He says that there is a good, healthy demand for hardwoods of all kinds.

George I. McClure declares that 1912 will go down in history as the biggest and best year Detroit hardwood men have ever had. He also says that the prospects for the coming year are just as bright. "Many big orders for hardwoods will be placed this month," said Mr. McClure, "and I expect to get my share of them. I have been handicapped by not having a sufficient number of warehouses, but by next spring I will have one big one which will be second to none in this section. I have two cargoes of approximately 700,000 feet coming in this week and with what I have on hand this will tide me over

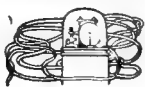
nicely until next spring. The demand for hardwood flooring is as brisk now as it has been at any time during the summer. Wide poplar is being used by the automobile body companies more extensively than at any time during the past two years."

El. Brownlee-Kelly Company reports a very good trade with satisfactory prices prevailing. "With the arrival of the last shipments by water we have proceeded to take an inventory of stock on hand," said Mr. Brownlee. "At the present time we have a fairly good supply on hand, but not what we should have. We have handled over 300,000,000 feet of hardwood lumber this year and are very much pleased with the prices we have received. No. 3 common, which is used mostly for crating, and thick maple, 1½ inches or thicker, is scarce and the prices on these materials are high. One Wisconsin firm has withdrawn its stock from the market and does not intend to sell until the February market opens, which shows that the prices are bound to go higher."

J. M. Clifford, large dealer in hardwoods, reports business very brisk. He says that prices on hardwoods are advancing rapidly and that stocks are scarce. He says that red oak is especially hard to get.

F. W. Mowbray of Mowbray & Robinson, Cincinnati, O., was a Detroit visitor recently.

Detroit box manufacturers report excellent business at the present time. All the box men complain that prices of lumber stocks have materially increased. A lively demand for packing cases in which No. 3 common is used is also reported.



CHICAGO

Continued activity is noted with the local trade. The slackening of business on account of the holiday season seems to have been slight with Chicago hardwood handlers. In fact the only change in the situation during the last two weeks is the generally healthy improvement in the whole tone of the market. This is in keeping with the improved conditions which have been noted for several months past. Continued difficulty in getting any satisfactory amount of dry stock is felt. There does not seem to be much improvement in the situation either at northern or southern mills supplying the local trade. Practically all items are moving briskly although, as noted two weeks ago, red gum is not exactly as it might well be considering the qualities of that wood. In fact there seems to be a real movement back to quartered oak. The Chicago market is taking this wood with increasing favor, just as it is reported from other hardwood centers. Low grades are generally practically out of the market, particularly cottonwood, poplar and basswood. Both rock and soft elm are in fair request. Ash is particularly active, as is also chestnut. Plain red oak still maintains its leading position.

NEW YORK

The hardwood market shows little change in the past fortnight. The general demand has increased so that local manufacturers find it difficult to secure desirable stocks within a reasonable length of time. Generally the stocks on hand are below normal and in some cases inadequate for current needs. The car shortage is not as severe as a month ago. Inquiry and demand continue strong and prices rule generally firm. Some items have shown an advance of two dollars, notably thick chestnut and plain



The Hardwood Market

oak. There has been a change in price on maple flooring, but only slight. Birch and maple are in good call, and other stocks are in demand. Low grades are moving with more freedom. There is nothing to indicate an immediate change in the general situation.

BUFFALO

Members of the hardwood trade are looking for a lessened amount of activity this month, but this far there has been a pretty good number of inquiries. Prices are generally holding very firm and little complaint is heard over conditions, except for the shortage of cars, which has hampered the yards in getting in and shipping out lumber. The lake season is now over and supplies from that direction at some yards are quite heavy.

Good oak continues to be in best demand and stocks are relatively small, as they have recently been. Where dry stocks are secured they find a ready sale. Quartered oak is not as strong as plain, but it has begun to be in better inquiry. Birch and maple are moving right along in good volume. Ash, elm and chestnut are also moderately active. Poplar is not doing much, but low grades are still scarce. In most grades mills are said to be well sold up on poplar.

PHILADELPHIA

The last fortnight has shown a considerable expansion in trade, and retail stocks are much depleted. With stocks at mill end sold way ahead, and the lack of sufficient cars for prompt delivery, the lumberman is having his own troubles at this time.

Furniture factories, box manufacturers and other consumers continue active, but are handicapped by a competition so keen that neither of them cares to risk an advance in price for fear

of being undermined by a sharp competitor and losing some good contracts. Every effort is being made to educate the trade up to a new system of prices, but in the interim buyers are naturally chary of buying hardwood lumber beyond actual needs. Prices in all standard woods of all grades have held firm, and in some instances of an extra scarcity of stock, values have moved upward. The trade is hopeful that the hardwood manufacturer will not blindly force figures up to prohibitive values, and so put a check rein on the neck of a dawning prosperity.

Oak continues to be the leader; quartered oak is gaining, and chestnut of all kinds is in good demand. Birch and maple are making new friends; poplar holds steady and ash is fairly active. The vincer and mahogany markets are in good shape.

PITTSBURGH

So far as demand is concerned, the hardwood market in Pittsburgh was never in better shape than just now. There is even more inquiry than two months ago. Of course there has been a drop in the orders and inquiries from yards due to the inventory season. On the other hand, purchasing agents of factories, corporations and railroads are putting in big requisitions for 1913 stock. The tendency is toward large orders and early delivery is demanded. Prices on this account are going up instead of going down. A few purchasing agents and yards are holding off from placing their next year's contracts in the hope that prices will tumble. According to wholesalers, however, this is a vain hope. There is no possibility, they say, of prices for good hardwoods being lower than at present, for all mills are rushed. The car shortage is not quite so bad as two weeks ago but shipments are still slow and wholesalers are quoting very cautiously on orders where early delivery is required.

BOSTON

There has been no abatement in the strength of the hardwood market. Demand in this market has been of fair volume but buyers are not anticipating their wants to any extent. The shortage of cars has handicapped both buyers and sellers for a month or two and reports from producing centers state that cars are still scarce. Manufacturers continue to hold prices with a great deal of strength. Their stocks of dry lumber are small and the majority of manufacturers show no anxiety to make sales. Money is much firmer, which may result in some manufacturers trying a little harder to make sales. So far there has been little indication of the money market affecting the price of hardwood lumber.

Manufacturing plants which are large consumers of hardwood have been fairly busy. Those plants making office furniture have been doing a large business. There has also been a strong demand for veneers and the plants producing this class of stock have been running very full and have a good volume of orders on hand.

In the market for plain oak there is considerable strength. Many sales have been made at the top price. Quartered oak continues to sell well at firm prices. Maple is in very fair call and well held. Walnut is in small offering and prices are high. Cypress has been in rather moderate demand. Some lots have been offered at slightly lower prices.

BALTIMORE

Even the most conservative members of the trade will admit that the hardwood business keeps up in a surprising manner, and the view is now generally accepted not only that there will be no excess of stocks throughout the win-

ter, but that if the weather should be such as to interfere with the operation of the mills to any extent, the assortments practically all along the line will be short. The car situation is better than it has been, only the southern roads being in a position where they cannot supply cars in anywhere near the required number. The northern lines generally are in fair shape, and while some delay occurs, no real embargo is now encountered. With respect to steamship facilities, a decided improvement has also taken place, although it is to be said that the volume of lumber and logs going over on the other side of the Atlantic is so large as to tax the space available on steamers. At the same time, the heavy forwardings do not appear to have an unfavorable effect upon the foreign markets. All of them appear to be taking lumber and logs in such quantities that there is really no surplus, and the interest shown in stocks tends to keep the quotations decidedly firm. The foreign buyers even feel that the situation warrants them in going up and meeting the terms of the exporters, who are obliged to advance their prices because of the sharp rise in the ocean freight rates and other expenses.

Apart from the ocean rates, the quotations in the domestic market are also on the upward trend. All grades of chestnut are strengthening. Even sound wormy chestnut is in good request at satisfactory figures, although the advance in this grade has been moderate. As far as can be learned, the mills are still in the position where they dispose of their product as fast as it can be turned out, and much lumber is being shipped before it is dry. Oak has perhaps never before been higher, and the interest in this wood is most active, both here and abroad. Export planks are being taken up with much freedom, and the mills are getting very attractive margins. The whole range of poplar is acceptable, if extra wide lumber be excepted, the price for such stocks somehow keeping appreciably below the figures which they should bring. In the main, however, the trade is in fine condition, and the mills are doing all they can to expedite operations, as the buyers are evidently ready to take up any more lumber.

CINCINNATI

There is a very strong tone to the hardwood market. All items on the list are selling well and dealers are having more trouble in locating desirable stocks than they have to dispose of them. Prices are very strong, especially plain oak, which is gaining in strength almost daily. Quartered oak, too, is showing much improvement and has passed from a drag on the market to a very good seller at the present time. Cottonwood in No. 2 and 3 common is the hardest hardwood to secure, and many dealers are not selling it for the present, at least, as it is impossible for them to get supplies from the mills with which to fill their orders. Red gum has had the call all season and is now in a very strong position, as is also sap gum, all grades of which are moving fast at good prices. Ash has become one of the best sellers on the list and thick stock is very scarce. Much buckeye is being used as a substitute for cottonwood whenever it can be obtained, and numerous other woods not formerly used to a great extent are finding a market. Maple is in great demand, as is also basswood, which is hard to obtain. All yard men report low stocks and while stock is coming in a little faster, owing to the easing up of the car shortage, the demand is so strong that little can be accumulated. However, dealers expect to be able to stock up fairly well in order to take care of the expected good spring business.

Hardwood flooring dealers are still doing a capacity business. Shipments during the past week have been unusually heavy and there is bound to be a steady demand all winter. Mills are all running full time and there is every

reason to believe that the present heavy demand will continue. High prices are the rule for all grades of hardwood flooring.

The poplar trade is considered fair but not quite what dealers would like. All low grades are in very heavy demand, and considerable trouble is experienced in supplying No. 2 and No. 3 common, both bringing top prices to the consuming trade. Trade in No. 1 common and better has been only fair for several months, although lately the demand had improved somewhat. Wide stock also is a little slow. Southern manufacturers do not seem to have any large stocks in any grade, and claim to be well supplied with orders.

Building operations are still active. More interior work is on hand for the finishers for the winter work than for several years and the planing mills are sure to be kept busy getting out this class of material. Wholesale dealers are doing a nice trade with the millwork men in rough lumber of all kinds from which this finish is produced.

TOLEDO

While there has been some little falling off recently in the demand for hardwoods from the building trades, the factory demand continues to exhibit a healthy activity. There is a heavy call from the interior finish concerns, and furniture and vehicle factories are using heavily of oak, hickory, ash and poplar. Poplar is quite plentiful on this market and there is considerable hickory coming in from the Southwest. Oak in dry stocks is hard to get and local stocks are running low. There are plenty of odds and ends on the market but dry stock in oak in wanted sizes is scarce and hard to get. Prices continue the same as heretofore.

The boxing concerns are heavy users this season and have plenty of business. Flooring continues in unusually good demand and is bringing satisfactory prices. The car situation continues bad and shipments are extremely slow.

INDIANAPOLIS

Hardwood dealers over the state are showing a tendency to hold off placing orders for replenishing their stocks for a while, in the belief that prices will break before long. Inquiries made among the manufacturers and wholesalers disclose that a decrease in prices at any early date is improbable.

While the car shortage is still on, hardwoods are moving a little better than they were a few weeks ago. Prices are steady and the demand among the retailers is fairly good, but the manufacturers and wholesalers are complaining because the dealers will not take hold.

The present year has been fairly satisfactory to local hardwood interests.

MEMPHIS

Business in hardwood lumber continues of very satisfactory proportions. Nearly all of the wholesalers and manufacturers here say that they are able to sell practically all of the lumber they are in position to offer and that it has been more difficult to secure cars and also to find the necessary lumber in shipping dry condition than to obtain orders. In fact, the latter have been coming in with a rush for the past few weeks in nearly all items on the hardwood list and the volume of business has been about as large as could be expected under the circumstances. It is also noteworthy that prices have been unusually well maintained. There has been no accumulation of hardwood lumber, particularly in shipping dry, during the past few weeks, and none is anticipated in the near future, if the lumber is being shipped out as rapidly as it is in condition.

General business conditions at Memphis are extremely satisfactory. Bank clearings during November broke all records for any single month in the history of this city, with a total of \$55,000,000. The large cotton sales and the excellent prices obtained thereon have in some measure accounted for this unusual gain in clearings, but other lines have made substantial contributions to this splendid showing. It is certain that the lumbermen have rendered more assistance than for several years at this time. It was in November, 1907, when the lumber business began the decline which lasted for several years. This is the first November since that time when business has really been satisfactory to the lumbermen of this city and section.

NASHVILLE

Conditions of the hardwood trade here continue favorable. The demands are still good and are being well sustained, although letting up slightly, perhaps, with the approach of the Christmas holidays. After the holidays, however, it is confidently believed there will be much activity all along the line. Red and white plain and quartered oak continue to lead in the demands, while cottonwood, gum and chestnut are still in good call. The box makers are especially calling for low-grade stock. High-grade poplar shows improvement. Walnut, hickory, beech, maple and other woods are about holding their own. There are good calls for railroad ties and timbers. The builders are rushing their work in an effort to get through with outside operations before the advent of real winter weather. The general tone of the market continues good. There has been a remarkable continuation of good weather for this season of the year. The consuming factories and mill working plants are making active calls for the season. Furniture prices bid fair to remain firm for the present at least notwithstanding advances elsewhere.

BRISTOL

Hardwood lumbermen of this city report trade more brisk than for some time. There is a decided scarcity of stocks and in some quarters a serious car shortage, but a large volume of

business is being done. Prices are slightly more favorable, with prospects of further improvement during the winter and spring. About all the mills are busy and the railroads are taxed to their capacity in moving the heavy traffic.

ST. LOUIS

The hardwood trade is seasonable, the nearness to the holidays and stocktaking time reducing the selling to small buyers. The large dealers, however, are buying whenever they can get the right kind of stocks. There is an excellent demand for plain red and white oak and the call for quarter-sawn white oak is getting better. All grades of cottonwood are selling well and so is red gum. There is a good request also for thick ash. Other items on the list are fairly active. Considering the lateness of the season, a fairly good volume of business is reported by the local cypress dealers, although stocktaking time is cutting down sales. Most of the sales now being made are for small lots and for quick shipment.

NEW ORLEANS

The hardwood lumber trade in all branches continues to share in the general prosperity, the only unfavorable feature being the scarcity of transportation equipment.

Dealers are pleased to report that some of the lower grades of hardwoods are very active at this time and that satisfactory prices are being obtained. With the lower grade business to fall back on, they can afford to await the freshening up of the movement of upper grades, and as the factory demand for uppers is improving steadily it is the opinion that it will not be many more weeks before all the local trade is back on its regular fall and winter basis and all dealers will be getting their share of the trade. While transportation facilities have had a slight effect on the local business, it has in some cases seriously affected the export hardwood trade.

In volume, the exports, as usual at this season, have been at a low figure the past few weeks and so far as it can be estimated the figures have shown a falling off for November. On the other hand, the shipments from New Orleans have equalled if not excelled those for November, 1911, and a complete compilation will probably show where the movement has been somewhat larger. For the remainder of the year, the prospect is for light movement, but as for a long time the limit is placed upon it by transportation facilities, and the market on the other side of the water will create demands on these facilities to their capacity.

Those shippers who have ocean contracts extending to the end of the year are making special efforts to get off as much as possible under the old rates, but this business is not of sufficient magnitude to affect the general situation, a great many contracts having expired Oct. 1. Outside of this, it is to be expected that December will be a comparatively quiet month, but there is no reason why the shipments should not equal the standard of the month for previous years.

MILWAUKEE

Although the demand for hardwoods is largely only for immediate wants, business is holding up especially well and is decidedly larger in volume than it was at this time a year ago. To a certain extent, this is due to the excellent weather which is keeping the building activity high above the point usually experienced at this season of the year. Conditions in the Milwaukee building field may be taken as a criterion of the situation all over the state.

Local wholesalers look for the sash and door

factories and other manufacturing plants to begin stocking up soon after the beginning of the new year, when inventories are out of the way and business for 1913 begins to make itself manifest. Dry stocks in all lines are still at a low ebb, in fact, were never lower at this season of the year. Reports from the northern mills would indicate that both logging and sawing operations will attain a new high mark this winter, if weather conditions are favorable. Considerable trouble is being experienced in getting stocks from both the North and the South.

Birch and maple in all grades are hard to get and advanced prices are being paid cheerfully in most cases. Basswood is wanted, but stocks in both upper and lower grades are light. Plain red and white quarter sawed oak are still the leaders in southern hardwoods and prices are somewhat higher.

DETROIT

Notwithstanding serious handicaps the Detroit hardwood market is in first class condition. One of the big problems the hardwood men are facing is the shortage of freight cars and resultant delays in shipments. Practically every dealer reports orders on hand which cannot be filled owing to delayed consignments. Prices have been steadily advancing and dealers expect further increases.

Red oak, maple, birch, ash and cypress have been the leaders in the demand. Red oak and maple stocks are reported scarce. Poplar is again in demand, automobile interests placing orders for this wood quite liberally. The building boom in Detroit, which has continued well into the winter months, has also done its share towards strengthening the hardwood market. The hardwood flooring and interior finish factories are all busy. The box and veneer trades also show considerable activity.

LIVERPOOL

The market position here is exceptionally strong and firm, even stronger than was reported in last report. The mahogany export is very firm. Very "bullish" reports have been received of the future market from the West coast. All the leading people prophesy even higher figures than were ruling at the last sales. The next sales will occur the second week in December and although there are three down on the fixture list, the wood offered is only small in quantity. Advices from Africa are that prices will have to advance still higher as the present supplies are being drawn further from the seaboard and consequently the cost of importation is much higher. The first shipments of hickory and oak logs this season have arrived and were sold at extraordinary prices. Hickory brought 2/11 and the 2/7 ex quay Liverpool. Round ash logs of any size are also wanted badly and prices are very firm for the small stocks on hand. Birch of any quality is practically non-existent. Only a few logs—old shakey stock—is on offer and this is not of much commercial value. Wagon oak specifications are going very well, and firm prices are being realized for all sizes. Coffin oak specifications are also very firm and are bringing good figures. Several orders for oak scantlings are much overdue, probably because of the high freights. Much grumbling is heard among trades here at the absence of shipments when the market is against the shippers. Of course the shippers who do not fulfill their contracts at times like these will lose much sympathy and it would be a more business-like policy for those who want future business to deliver all the stock they have contracted for. The volume of business during the past fortnight has been quite bad even in spite of high prices though it is mighty difficult to get anyone to contract far ahead at present values.

THREE STATES LUMBER CO.
Manufacturers of
SOUTHERN HARDWOODS
Cottonwood and Red Gum
SPECIALTIES
Main Office, Memphis, Tenn.

BLUESTONE LAND & LUMBER COMPANY

MANUFACTURERS

West Virginia Hardwoods

SOFT WHITE PINE
OAK POPLAR
CHESTNUT HEMLOCK

BAND SAWED STOCK

Complete Planing Mill Facilities

RIDGWAY, PENNSYLVANIA

THIS IS OUR RECORD

In Business	- - - - -	7 ³ / ₄ Years
Losses Paid	- - - - -	\$1,100,000
Savings Effected for Subscribers	- - - - -	700,000
Quick Assets Belonging to Subscribers	- - - - -	775,000

More Cash Assets to each \$100 of Outstanding Liability than the Largest Stock Companies

Entire Interest Earnings Paid to Subscribers

Experience has demonstrated that from one-third to one-half of the cost of their insurance can be saved to the LUMBERMEN by carrying ALLIANCE POLICIES. Give us the opportunity to make these substantial savings for YOU.

Lumbermen's Underwriting Alliance

U. S. EPPERSON & COMPANY, ATTY. & MGR.

R. A. Long Bldg.

Kansas City, Mo.

Advertisers' Directory

NORTHERN HARDWOODS.

American Lumber & Mfg. Co.....	17
Beecher & Barr.....	16
Bradley, E. C., Lumber Co.....	14
Brown Brothers Lumber Company.....	60
Buffalo Hardwood Lumber Co.....	66
Coale, Thos. E., Lumber Company.....	16
Cibbs & Mitchell, Inc.....	3
Craig, W. P., Lumber Co.....	3
Curl, Daniel B.....	16
Darling, Chas. & Co.....	53
Elias G. & Bro.....	66
Estabrook-Skeele Lumber Co.....	5
Flanner-Steger Land & Lumber Co.....	4
Forman Company, Thomas.....	59
Goodyear, C. A., Lumber Co.....	60
Hadentine Lumber Company, Inc.....	62
Hanson-Turner Company.....	13
Heyser, W. E. Lumber Co.....	17
Holyoke, Chas.....	1
Holloway Hardwood Lumber Co.....	1
Jones Hardwood Company.....	16
Kent, J. S., Company.....	17
Klann, E. H.....	53
Kneeland-Bigelow Company, The.....	3
Litchfield, William E.....	16
Long-Knight Lumber Company.....	1
MacLaren, D. B., Lumber Company.....	17
McIlvain, J. Gibson, & Co.....	2
McLean, Hugh, Lumber Co.....	66
McFarland Hardwood Lumber Co.....	53
Miller, Anthony.....	66
Mitchell Bros. Company.....	3
Mowbray & Robinson.....	13
Oelhafen Lumber Company.....	60
Osgood & Richardson.....	53
Palmer & Parker Co.....	16
Perrine-Armstrong Company.....	60
Salling-Hanson Company.....	59
Sawyer-Goodman Company.....	60
Schultz, Holloway Co.....	4
Smith, Fred D.....	53
Standard Hardwood Lumber Co.....	66
Stearns Salt & Lumber Company.....	9
Stephenson, I., Company, The.....	59
Stewart I. N. & Brother.....	66
Stimson, J. V., & Co.....	64
Sullivan, T. & Co.....	66
Tegge Lumber Co.....	60
Vinke, J. & J.....	59
VonPlaten Lumber Co.....	59
Webster Lumber Co., George.....	17
White, Wm. H. Co.....	68
Wiggin, H. D.....	17
Williams, Ichabod T., & Sons.....	16
Willson Bros. Lumber Company.....	16
Wisconsin Land & Lumber Co.....	59
Wistar, Underhill & Nixon.....	16
Wood-Mosaic Company.....	17
Yeager, Orson E.....	66
Young, W. D. & Co.....	3

SOUTHERN HARDWOODS.

American Lumber & Mfg. Co.....	17
Anderson-Tully Company.....	9
Atlantic Lumber Company.....	17
Baker-Matthews Mfg. Co.....	65
Bennett & Witte.....	13
Bluestone Land & Lumber Co.....	49
Boice Lumber Company.....	65
Booker-Cecil Company.....	11
Bradley, E. C., Lumber Co.....	14
Brown, W. P., & Sons Lumber Co.....	11
Buffalo Hardwood Lumber Co.....	66
Carrier Lumber & Mfg. Co.....	18
Cherokee Lumber Co.....	16
Coale, Thos. E., Lumber Company.....	16
Curl, Daniel B.....	16
Darling, Chas. E. & Co.....	53
Davis, Edward L., Lumber Company.....	53
Dempsey, W. W.....	65
Duhlmeier Brothers.....	14
Elias, G. & Bro.....	66
Estabrook-Skeele Lumber Co.....	5
Farrin, M. B., Lumber Company.....	14
Faust Bros. Lumber Co.....	18
Flanner-Steger Land & Lumber Co.....	4
Garetson-Greaseon Lumber Co.....	65
Hadentine Lumber Company, Inc.....	6
Hamilton, J. V.....	64
Heyser, W. E., Lumber Company.....	13
Hill Brothers Tie & Lumber Co.....	10
Himmelberger-Harrison Lumber Co.....	65
Hitt, H. H., Lumber Company.....	64
Holloway Hardwood Lumber Co.....	1
Huddleston-Marsh Lumber Co.....	5
Kent, J. S., Company.....	17
Kentucky Lumber Co.....	14
Keys-Walker Lumber Co.....	6
Kimball & Kopcke.....	6
Klann, E. H.....	53
Lamb-Fish Lumber Co.....	8
Litchfield, William E.....	16
Little River Lumber Company.....	18
Logan-Maphet Lumber Co.....	1
Long-Knight Lumber Company.....	6
Louisiana Long Leaf Lumber Co.....	65
Louisville Point Lumber Company.....	7
Love, Boyd & Co.....	11
Maley, Thompson & Moffett Co.....	13
Maphet & Shea Lumber Company.....	6
McIlvain, J. Gibson, & Co.....	2
McLean, Hugh, Lumber Co.....	66
McFarland Hardwood Lumber Co.....	53
Miller, Anthony.....	66
Mowbray & Robinson.....	13
Norman Lumber Company.....	11
Ohio River Saw Mill Company.....	11
Osgood & Richardson.....	53
Paspoke-Leicht Lumber Company.....	8
Peytona Lumber Company, Inc.....	10
Radina, L. W., & Co.....	14
Ransom, J. B., & Co.....	7
Ritter, W. M., Lumber Company.....	68
Russe & Burgess, Inc.....	18
Salt Lick Lumber Company.....	65
Schultz, Holloway Co.....	4
Slaymaker, S. E. & Co.....	1

Smith, Fred D.....	53
Standard Hardwood Lumber Co.....	66
Stewart, I. N., & Brother.....	66
Stimson, J. V., & Co.....	64
Sullivan, T. & Co.....	66
Tennessee Hardwood Lumber Co.....	7
Three States Lumber Company.....	49
Vestal Lumber & Manufacturing Co.....	6
Vinke, J. & J.....	59
Von Platen Lumber Co.....	59
Webster Lumber Co., George.....	17
West Virginia Timber Company.....	10
Whiting, Wm. S.....	65
Whitmer, Wm. & Sons.....	16
Wiggin, H. D.....	17
Williams, Ichabod T., & Sons.....	16
Willson Bros. Lumber Company.....	16
Wistar, Underhill & Nixon.....	16
Wood-Mosaic Company.....	17
Wood, R. E., Lumber Company.....	17
Yeager, Orson E.....	66

Penrod Walnut & Veneer Co.....	61
Purcell, Frank.....	65
Rayner, J.....	5
Willey, C. L.....	1
Williams, Ichabod T., & Sons.....	1

HARDWOOD FLOORING.

Beecher & Barr.....	16
Carrier Lumber & Mfg. Co.....	18
Cobbs & Mitchell, Inc.....	3
Eastman, S. L., Flooring Co.....	59
Farrin, M. B. Lumber Company.....	14
Korman, Thos., Company.....	59
Kerry & Hanson Flooring Co.....	59
Louisiana Long Leaf Lumber Co.....	65
Mitchell Bros. Company.....	3
Robbins Lumber Co.....	60
Salt Lick Lumber Company.....	65
Stearns Salt & Lumber Company.....	9
Stephenson, I., Company, The.....	59
Webster Lumber Co., George.....	17
White, Wm. H. Co.....	68
Wilce, T., Company, The.....	5
Wisconsin Land & Lumber Co.....	59
Young, W. D., & Co.....	3

WOODWORKING MACHINERY.

Cadillac Machine Co.....	55
Defiance Machine Works, The.....	12
Linderman Machine Co., The.....	67
Mershon, W. B., & Co.....	9
Phoenix Manufacturing Co.....	58
Saranac Machine Company.....	57
Smith, H. B., Machine Co.....	16
Steinmetz, C. M.....	16
Westinghouse Electric & Mfg. Co.....	16

LOGGING MACHINERY.

Baldwin Locomotive Wks.....	55
Clyde Iron Works.....	12
Lidgerwood Mfg. Co.....	16
Russel Wheel & Foundry Co.....	55

DRY KILNS AND BLOWERS.

Grand Rapids Veneer Works.....	58
Phila. Textile Mch. Co.....	1

SAWS, KNIVES AND SUPPLIES.

Atkins, E. C., & Co.....	56
Simonds Mfg. Co.....	57

LUMBER INSURANCE.

Central Manufacturers' Mut. Ins. Co.....	1
Epperson, U. S.....	50
Indiana Lumbermen's Mut. Ins. Co.....	1
Lumber Mutual Fire Insurance Co.....	1
Lumbermen's Mutual Ins. Co.....	1
Lumbermen's Underwriting Alliance.....	50
Lumber Underwriters.....	18
Pennsylvania Lumbermen's Mutual Fire Ins. Co.....	1
Rankin, Harry & Co.....	1

TIMBER LANDS.

Lacey, James D., & Co.....	2
Spry, John C.....	5

MISCELLANEOUS.

American Freight Audit & Storage Company.....	18
Astoria Veneer Mills & Dock Co.....	63
Childs, S. D. & Co.....	53
Durant-Dort Carriage Company.....	12
Gerlach, The Peter, Company.....	53
Lumbermen's Credit Association.....	5
Mechanical Rubber Company.....	58
Tamm's Silica Company.....	53
Wausau Advancement Association.....	1
Westinghouse Electric & Mfg. Co.....	1

POPLAR.

Anderson-Tully Company.....	14
Atlantic Lumber Company.....	18
Farrin, M. B., Lumber Company.....	4
Faust Bros. Lumber Company.....	18
Hadentine Lumber Company, Inc.....	6
Kentucky Lumber Company.....	14
Keys-Walker Lumber Company.....	6
Logan-Maphet Lumber Co.....	6
Maphet & Shea Lumber Company.....	6
Peytona Lumber Company, Inc.....	10
Radina, L. W., & Co.....	14
Ritter, W. M., Lumber Company.....	68
Vansant, Kitchen & Co.....	68
West Virginia Timber Company.....	10
Whiting, Wm. S.....	65
Wood, R. E., Lumber Company.....	17
Yellow Poplar Lumber Company.....	68

VENEERS AND PANELS.

Adams & Raymond Veneer Co.....	64
Ahnapee Veneer & Seating Co.....	62
Astoria Veneer Mills & Dock Co.....	63
Cadillac Veneer Company.....	6
Central Veneer Company.....	10
Gorham Brothers Company.....	61
Hanson-Turner Company.....	62
Hoffman Bros. Company.....	61
Huddleston-Marsh Lumber Co.....	5
Jarrell, B. C. & Co.....	64
Kentucky Veneer Works.....	61
Kiel Wooden Ware Company.....	62
Knoxville Veneer Company.....	6
Louisville Veneer Mills.....	11
Maley, Thompson & Moffett Co.....	13
Mengel, C. C. & Bro. Company.....	11
Ohio Veneer Company.....	13
Penrod Walnut & Veneer Co.....	61
Rayner, J.....	5
Radford-Portsmouth Veneer Co.....	63
Rice Veneer & Lumber Company.....	61
Southern Veneer Manufacturing Company.....	63
Underwood Veneer Company.....	63
Veneer Manufacturers' Company.....	5
Walker Veneer & Panel Co.....	53
Willey, C. L.....	1
Williams, Ichabod T., & Sons.....	16
Wisconsin Seating Company.....	62
Wood-Mosaic Company.....	17

MAHOGANY, WALNUT, ETC.

Astoria Veneer Mills & Dock Co.....	63
Duhlmeier Brothers.....	14
Hamilton, J. V.....	64
Huddleston-Marsh Lumber Co.....	5
Maley, Thompson & Moffett Co.....	13
Mengel, C. C. & Bro. Company.....	11
Palmer & Parker Co.....	16

CLASSIFIED ADVERTISEMENTS

Advertisements will be inserted in this section at the following rates:

For one insertion.....20c a line
For two insertions.....35c a line
For three insertions.....50c a line
For four insertions.....60c a line

Eight words of ordinary length make one line. Heading counts as two lines. No display except the headings can be admitted.

Remittances to accompany the order. No extra charges for copies of paper containing the advertisement.

EMPLOYES WANTED

WANTED

Salesmen on our New Census publications. Splendid opportunity. Men making \$50 to \$75 per week.

RAND, McNALLY & CO.,
Dept. B., Chicago, Ill.

WANTED

An experienced Veneer Slicer operator. In replying give full information, by whom you have been employed; what kinds of wood you have cut, your age, married or single, and references. Address "BOX 121," care HARDWOOD RECORD.

IF YOU WANT

competent employees in any department of the hardwood business, there is no better way of securing them than by employing the Classified Advertisements section of HARDWOOD RECORD, which reaches woodsmen, sawmill men and salesmen in all parts of the country.

EMPLOYMENT WANTED

WANTED—EMPLOYMENT

When you want a salesman for New York state territory, write us. We can supply you with a good man. EMPIRE STATE ASSOCIATION of Wholesale Lumber & Sash & Door Salesmen. Chas. Johnson, Sec'y, 96 Kirkland Rd., Rochester, N. Y.

TIMBER ESTIMATING

TIMBER ESTIMATES

Estimating Southern timber a specialty. Maps, detailed reports as to stand, quality and logging conditions. Have a few high-class properties for sale. Can furnish best references.

THOS. J. McDONALD,
East Tenn. Natl. Bank Bldg.,
Knoxville, Tenn.

WAGON STOCK WANTED

WANTED—WAGON STOCK

Wagon tongues, reaches, bolsters, hickory dimension stock for buggy and wagon work. Inspection at mill points.

J. A. BROWNE & CO., INC.,
North Manchester, Ind.

I AM IN THE MARKET FOR

75 to 100 cars of oak poles, bolsters, sand boards, eveners, and reaches; and hickory and maple axles. Will inspect at shipping point, and pay cash. E. B. BROWN, 372 Bayne St., Buffalo, N. Y.

LOGS WANTED

WANTED—BLACK WALNUT LOGS

We want hewed black walnut logs for export. 16 inches and upward in diameter. Terms cash. JOHN L. ALCOCK & CO., P. O. Box 994, Baltimore, Md.

WANTED—BLACK WALNUT LOGS

500 cars good black walnut logs, 10" and up in diameter, 6 ft. and up long. Will inspect at shipping point and pay cash. GEO. W. HARTZELL, Dayton, Ohio.

WANTED—HARDWOOD LOGS

200,000 ft. 28" and up White Oak logs.
200,000 ft. 12" and up Walnut logs.
50,000 ft. 12" and up Cherry logs.
C. L. WILLEY, 2558 S. Robey St., Chicago.

TIMBER LANDS FOR SALE

FOR SALE—TWO HUNDRED MILLION

Feet stumpage hardwood; very fine proposition; on railroad western N. C. J. M. ASKEW, 79 Cumberland Ave., Asheville, N. C.

ARE YOU INTERESTED IN GUM and Red Oak?

I own in fee simple two small and carefully selected tracks of high-class gum and red oak stumpage. Will sell at price to make the buyer good money either as an investment or as an operating proposition.

Will deal with principals only. Address in confidence, "BOX 22," care HARDWOOD RECORD.

TIMBER FOR SALE

FOR SALE—HARDWOOD TIMBER

6,118 acres in fee simple of virgin timber land having on it the following: Oak, 15 million feet; cypress, 12 million feet; gum, 12 million feet; pine, 10 million feet. This is located in North Louisiana and is fine timber. Address "OWNER," care HARDWOOD RECORD.

LUMBER FOR SALE

FOR SALE

Cottonwood which will be cut during the next sixty days. About 200,000 feet of wagon boards, any widths or lengths, absolutely clear, high grade. Also about 200,000 feet of No. 1 common and better. Please let us have your best cash offer, f. o. b. Omaha. Address "BOX 115," care HARDWOOD RECORD.

FOR SALE

Common White Mahogany and common Peruvian Mahogany, which we would like to move. DIECKMANN HARDWOOD CO., San Francisco, Cal.

OAK, POPLAR, ASH

and all other hardwoods, in all grades and thicknesses, can be readily sold if advertised in the Wanted and For Sale section of HARDWOOD RECORD. If you have a large stock you want to sell try a few lines in this department and see what a lot of inquiries they will bring you.

FOR SALE—BAY POPLAR

At our Arden Mill, freight rate to
Norfolk, Va.....8c
Baltimore.....15c
Philadelphia.....16c
New York City.....20c
Boston.....23c

We offer 400 M feet 1x6" and wider Bay Poplar, thoroughly bone dry and straight, good widths and lengths, beautiful stock, piled for 1sts and 2nds, but will likely down grade in shipping about 20% No. 1 common. This stock is cut heavy and most of it would dress two sides 1" thick. For quick shipment will quote special prices.

AMERICAN LBR. & MFG. CO., Pittsburgh, Pa.

FOR SALE

Car Curly Poplar, largely 4/4.
2 cars 4/4 No. 1 Common Poplar
3 cars 8/4 No. 2 Common Poplar
Address P. O. BOX 174, Hickory, N. C.

DIMENSION STOCK WANTED

WANTED

Five or ten carloads 2½"x2½"x30" White Oak Squares for delivery beginning at once. Address "BOX 117," care HARDWOOD RECORD.

WANTED—DIMENSION STOCK

Oak, plain and quartered; boards and squares. Also dogwood and persimmon.

INDIANA QUARTERED OAK CO.,
7 East 42d St., New York, N. Y.

WANTED

1½x1½x36, Oak, Ash or Hickory
1½x1½x40, Oak, Ash or Hickory
1 x2¼x40, Oak or Ash
1¼x2 x40, Oak or Ash
1½x2 x36 to 40, Oak or Ash, in large quantities.

THE WISCONSIN CHAIR CO.,
Port Washington, Wis.

LUMBER WANTED

WE SHOULD LIKE TO HEAR FROM

Any firms in a position to supply Poplar Electric Casings, and also from those in a position to supply Red Gum Veneers.

Address "BOX 122," care HARDWOOD RECORD.

WANTED

Five cars 1" No. 3 common chestnut.
DUHLMEIER BROTHERS, Cincinnati, O.

BUYERS OF HARDWOODS.

Do you want to get in touch with the best buyers of hardwood lumber? We have a list, showing the annual requirements in lumber, dimension stock and veneers and panels of consumers of those materials throughout the United States and Canada. The service is free to advertisers in the RECORD. It will interest you. Write us for further information about our "Selling Lumber by Mail System."

HARDWOOD RECORD, Ellsworth Bldg.,
Chicago.

BUSINESS OPPORTUNITIES**EXCELLENT OPPORTUNITY**

for man to go in manufacturing business. Have well-equipped hardwood factory suitable for making spokes and vehicle stock. Healthy location in town six thousand, on two rivers and two railroads. Address

"BOX 72," care HARDWOOD RECORD.

WOOD ALCOHOL PLANT

We have a very desirable location and ample supply of raw material for a wood alcohol plant. Will be glad to negotiate with anyone interested in the establishment of such an industry.

GEO. WEBSTER LBR. CO.,
21 Besse Place, Springfield, Mass.

RECEIVER'S SALE

Well-equipped Furniture Factory, now in operation, together with large stock of finished and unfinished furniture in course of manufacture; about 300,000 feet of seasoned lumber; good three-story brick factory and warehouse buildings; 50,000 square feet floor space; good railroad facilities, sawmill in connection; skilled non-union labor; established trade; splendid opportunity. Will be offered at private sale by order of court, Thursday, Jan. 16, 1913. For information address A. B. WYCOFF, Receiver, Batesville, Ind.

PARTNERSHIP INTEREST FOR SALE

Non-resident partner in Hardwood Manufacturing company will dispose of controlling interest.

Address "BOX 120," care HARDWOOD RECORD.

WANTED TO BUY

one hundred and eight dry kiln bunks, six feet long, six inch wheels, roller bearings.

THE TAYLOR CHAIR CO., Bedford, O.

MACHINERY FOR SALE**FOR SALE AT A BARGAIN**

One Coe 76"x52" Veneer Lathe.

One Coe 76" Veneer Clipper.

One 76" S. C. Rogers Buffalo Knife Grinder.

All machinery guaranteed to do first-class work, and good reasons for wanting to sell. Address "BOX 116," care HARDWOOD RECORD.

FOR SALE—CIRCLE SAW MILL

Capacity 12,000 feet.

BARGERSVILLE LBR. CO., Bangersville, Ind.

MACHINERY WANTED**EXPORT**

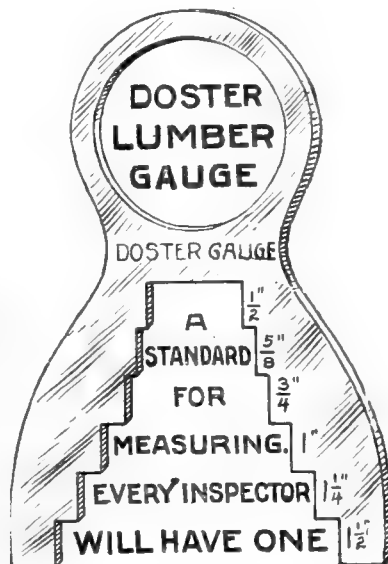
Well known export firm, thoroughly acquainted with the European markets, and with extensive connections with first-class mills, especially in West Virginia, with the object of handling their stock for export. Principal will spend most time in Europe. Can furnish all references. Address "BOX 123," care HARDWOOD RECORD.

MISCELLANEOUS**WANTED—HARDWOOD LUMBERMEN—**

to try the Gibson Tally Book. The three-throw aluminum tally ticket cover accommodates any form of ticket desired. The use of the special triplicate tally ticket supplied, printed on waterproof paper with carbon backs makes tallies unalterable. For durability, convenience, accuracy and for systematizing the inspection of lumber the Gibson tally method can't be beat.

Special forms of tally tickets mailed on application. Covers sold on approval to responsible concerns.

HARDWOOD RECORD,
537 So. Dearborn St., Chicago.



For sale by HARDWOOD RECORD,
537 S. Dearborn St., Chicago, Ill.
50 CENTS EACH.

**CHICAGO**

McParland Hardwood
Lumber Co. 2204 S. Laflin St.
HARDWOODS

FRED D. SMITH
HARDWOOD LUMBER

1337-1343 North Branch St. CHICAGO

E. H. KLANN

Cottonwood, Gum, Oak, Ash, Cypress,
Yellow Pine, Dimension Stock

819 FISHER BLDG. HAR. 1187

Osgood & Richardson
935 Peoples Gas Bldg.

NORTHERN AND SOUTHERN
HARDWOODS

Chicago Agents: LAMB-FISH LUMBER CO.

Telephone Canal 1688

CHAS. DARLING & CO.
HARDWOOD LUMBER
22nd Street and Center Avenue
CHICAGO



99% PURE
SILICA
OR SILEX FOR WOOD FILLERS
TAMMS SILICA CO., 19 So. 5th Ave., Chicago

COUNTERFEIT CHECKS

are frequent
except where
our

Two Piece
Geometrical
Barber Coin
is in use, then
imitation isn't
possible.
Sample if you
ask for it.

S. D. CHILDS
& CO.
Chicago
We also make
Time Checks,
Stencil and
Log Hammers



This is Form Y

Y G. M. CC. -- FAT. -- AN. 3, 1, 101

Elkmont Contracting & Supply Co.

Elkmont, Tenn.

Camp _____

191 _____

DIA.	8	10	12	14	16		DIA.	8	10	12	14	16	TOTAL
8							37						
9							38						
10							39						
11							40						
12							41						
13							42						
14							43						
15							44						
16							45						
17							46						
18							47						
19							48						
20							49						
21							50						
22							51						
23							52						
24							53						
25							54						
26							55						
27							56						
28													
29													
30													
31													
32													
33													
34													
35													
36													
Total													
TOTAL NO. LOGS & AM'T. IN FEET													
CARS — AVERAGE PER CAR													

REMARKS:

SCALER

Of Single Duplicate or Tripli-
cate Log Tally Ticket (with-
out Loose Carbon Sheets)
used in the

Gibson Aluminum Tally Book Covers

MANUFACTURED BY

HARDWOOD RECORD

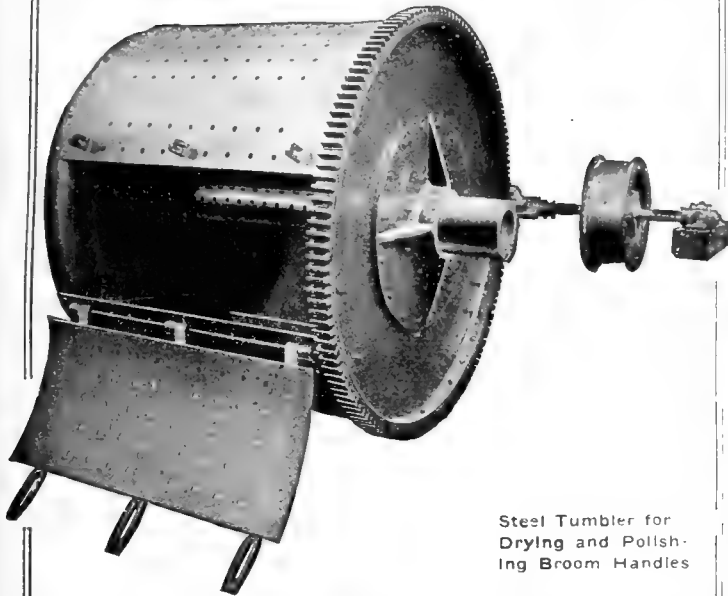
 537 S. Dearborn Street
CHICAGO

Let us send you catalogue and
price list of scores of forms of
lumber, flooring and log tally
tickets.

The Gibson Tally Book System
has more than 2,500 users.

Broom Handle Machinery

Let us tell you about our **STEEL TUMBLERS FOR DRYING AND POLISHING BROOM HANDLES.** This system is rapidly supplanting all others. More economical; less time required for drying; no polishing afterwards; greater per cent of straight handles turned out.



Steel Tumbler for
Drying and Polishing
Broom Handles

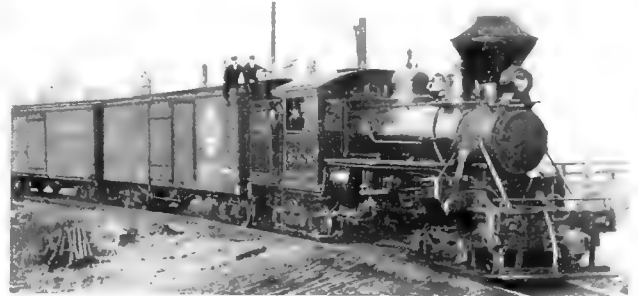
CADILLAC MACHINE COMPANY

Complete Line of Broom Handle Machinery

CADILLAC, MICH.

Baldwin Geared Locomotive

Locomotives must operate on steep grades, sharp curves and uneven tracks. This is what the geared locomotive illustrated has been designed to do. It is symmetrical in construction, and power is transmitted to the axles through a central drive. The valve motion is simple and accessible, and all new features have been tried out in service.



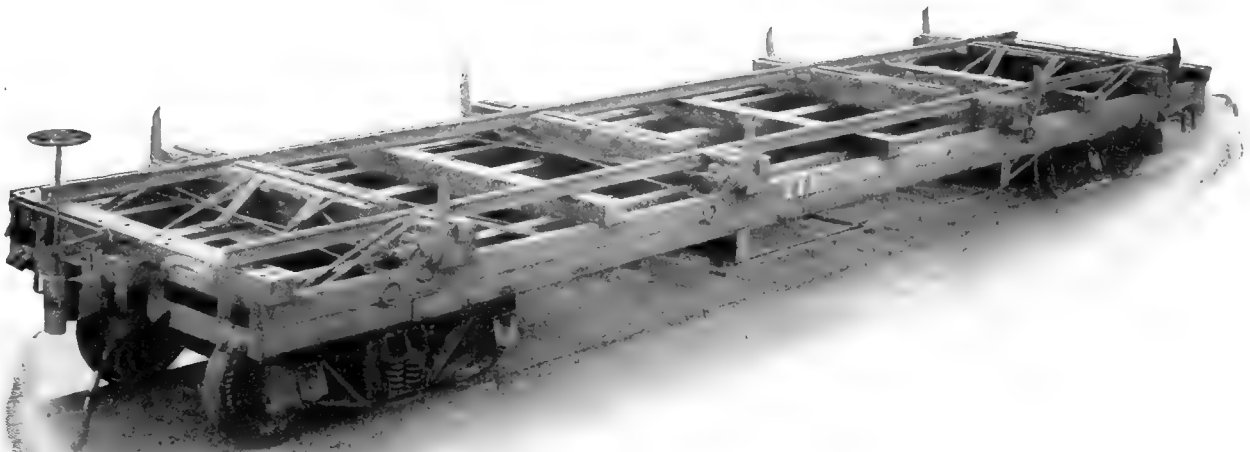
This locomotive is well-designed, well-built and fully guaranteed. Various sizes can be furnished, to suit different track and operating conditions.

THE BALDWIN LOCOMOTIVE WORKS
PHILADELPHIA, PA., U. S. A.

Cable Address:—"Baldwin, Philadelphia"

Branch Offices:
New York, N. Y., Hudson Terminal; St. Louis, Mo., Wright Building;
Chicago, Ill., Railway Exchange; Portland, Ore., Spalding Building;
Richmond, Va., Travelers Building.

RUSSEL LOGGING CARS



70,000 LBS. CAPACITY SKELETON TYPE RUSSEL CAR, EQUIPPED WITH LOADER RAILS AND RUSSEL PATENT DROP STAKES. THIS CAR COMPLIES WITH M. C. B. RULES AND SAFETY APPLIANCE ACTS.

Years of Hard Service Have Demonstrated Russel Cars to be Superior in Quality and Construction. Built for any Capacity Desired

RUSSEL WHEEL AND FOUNDRY CO.

DETROIT, MICHIGAN

Everybody's Doing It

Doing What?
Using

ATKINS SILVER STEEL SAWS

And Why?

Because they are made of the finest material.
Because we employ the highest class mechanics.
Because they will stand up to their work and make good.
Because they are the "Finest on Earth."

If your regular dealer will not supply you with the genuine ATKINS SILVER STEEL SAW—then write to the nearest address below, and we'll give you prompt service.

BAND SAWS

CIRCULAR SAWS

CROSS CUT SAWS

GANG SAWS

A Perfect Saw for Every Purpose

MACHINE KNIVES

E. C. ATKINS & CO., Inc.

The Silver Steel Saw People

Home Office and Factory, Indianapolis, Ind.

BRANCHES: Atlanta, Chicago, Memphis, Minneapolis, New Orleans, New York City,
Portland, San Francisco, Seattle, Vancouver, B. C. Sydney, N. S. W.

CANADIAN FACTORY: Hamilton, Ont.

Saw Repairs

IF there is any Saw Repair work that you want done to get things in final shape for winter, ship your saws to a Simonds Factory just as soon as you can and we will do the work right.

Tags for shipping furnished on request.

SIMONDS

MANUFACTURING COMPANY

Fitchburg, Mass.
New York City
Portland, Ore.

Vancouver, B. C.
Chicago, Ill.
New Orleans, La.
San Francisco, Cal.

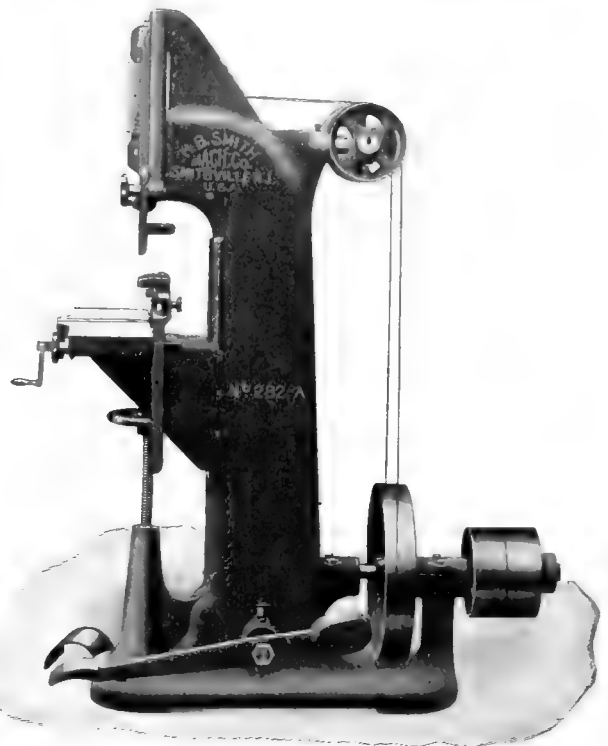
Montreal, Que.
Seattle, Wash.
St. John, N. B.

ESTABLISHED
1847

SMITH
H. B. SMITH MACHINE CO.
SMITHVILLE, N. J.

INCORPORATED
1878

A NEW POWER MORTISER



THE NEW AUTOMATIC MORTISER

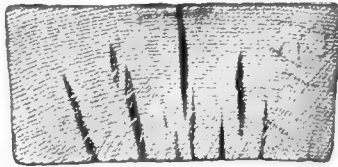
No. 282-A operates a **Hollow Chisel** with **Auger** within for removing chips. Works all kinds of **woods** rapidly and the **chisel** is brought into the work by power.

SEND FOR CIRCULARS

H. B. Smith Machine Co.

Smithville, N. J., U. S. A.

New York Chicago Atlanta San Francisco



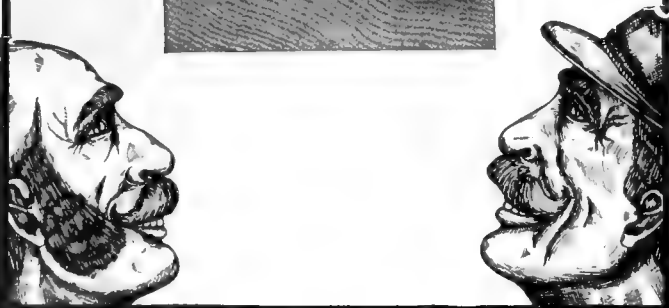
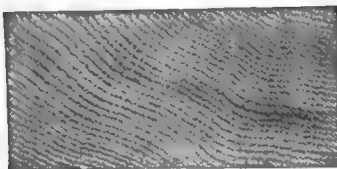
If you attempt to dry two-inch oak in your kiln in fourteen days the result will probably resemble the above illustration.

The lower picture is from a photograph of two-inch oak dried by the Grand Rapids Veneer Works Process in fourteen days, and every plank as sound as the sample.

The absence of checks is not the only saving due to this process. The lumber is straight, soft and free from sap or acids.

For a small sum of money your old kilns can be converted to G. R. V. W. Process Kilns, with a guarantee to give the results above described.

Grand Rapids Veneer Works
GRAND RAPIDS, MICH.



Corrugated Joint Fasteners

Can be quickly and cheaply driven with

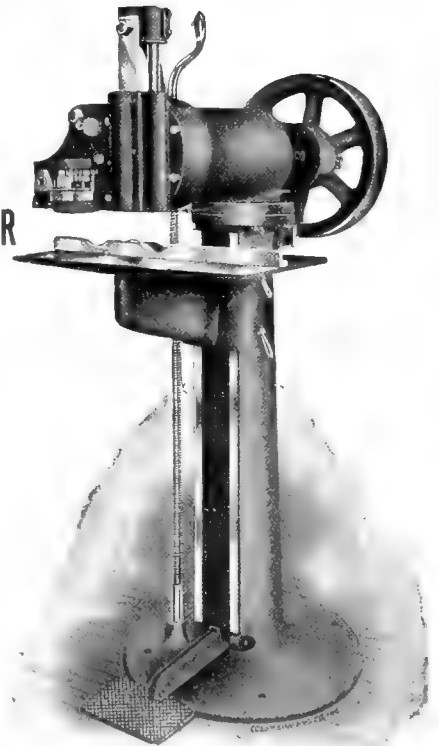
"ADVANCE" CORRUGATED JOINT FASTENER MACHINE

Made in Different
Types to Meet
All Conditions

Specially suitable for
manufacturers of
sash, doors, blinds,
screens, coffins,
furniture, plumbers'
wood-work, porch
columns, boxes,
refrigerators, etc.

Write for bulletins
and prices.

Manufactured only
by



Saranac Machine Co., St. Joseph, Michigan

**ELEPHANT
RUBBER**

BELTING

AIR DRILL AND AIR TOOL

HOSE

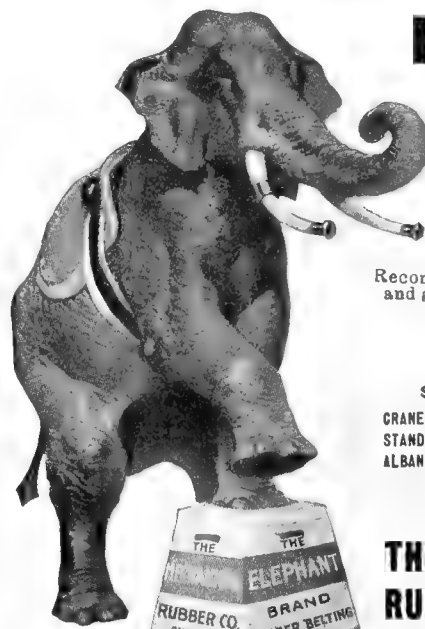
**STEAM
WATER
SUCTION**

EXTRA QUALITY

Recommended for hard service
and guaranteed to do the work

SELLING AGENTS

CRANE COMPANY • • ALL BRANCHES
STANDARD EQUIPMENT CO., MOBILE, ALA
ALBANY MILL SUPPLY CO., ALBANY, GA.



**THE MECHANICAL
RUBBER COMPANY**

(Chicago Rubber Works)

**307 W. Randolph Street,
ESTABLISHED 1882**

CHICAGO

MICHIGAN

FAMOUS FOR HARD MAPLE AND GREY ELM

"Ideal" Steel Burnished Rock Maple Flooring

is the flooring that is manufactured expressly to supply the demand for the best. It is made by modern machinery from carefully-selected stock and every precaution is taken throughout our entire system to make it fulfill in every particular its name—"IDEAL."

ROUGH OR FINISHED LUMBER—ALL KINDS

Send Us Your Inquiries

The I. Stephenson Company - **WELLS, MICHIGAN**

1sts & 2nds	4/4	175,000
MICHIGAN	5/4	195,000
MAPLE	8/4	150,000
	10/4	75,000
	12/4	50,000
	16/4	110,000

For shipment from our
Detroit Yard during
October and November.

PLEASE WRITE US QUICKLY FOR PRICES

THOMAS FORMAN COMPANY
DETROIT

IXL ROCK MAPLE FLOORING

Birch and
Selected Red Birch



"The Standard" of Excellence

**Wisconsin Land & Lumber
Company** Hermansville, Michigan

BIRCH, ASH, ELM, BASSWOOD AND HEMLOCK LUMBER
Basswood Siding, Ceiling, and Moulding

Von Platen Lumber Co.

Iron Mountain, Michigan

Manufacturers of

**BIRCH
BASSWOOD
ELM
MAPLE**

We Solicit Your Inquiries

SHIPMENTS VIA C. & N. W.—C., M. & ST. P.—W. & M.

SALLING, HANSON CO.

MANUFACTURERS OF

Michigan Hardwoods

GRAYLING, MICHIGAN

S. L. EASTMAN FLOORING CO.
SAGINAW BRAND
MAPLE FLOORING
SAGINAW, MICH.

"Chief Brand" Maple and Beech Flooring

in $\frac{3}{4}$, $\frac{5}{8}$ and 13-16 and 1 1-16 inch Maple
in all standard widths and grades, will
commend itself to you and your trade
on its merits alone

WRITE US, WE CAN INTEREST YOU

Kerry & Hanson Flooring Co.

GRAYLING, MICHIGAN



For items of Hardwood Stock or Hardwood
Machinery, you will find it advantageous to
write our advertisers. Get in touch!

WISCONSIN

WHERE THE FINEST NORTHERN HARDWOODS GROW

WE MANUFACTURE MICHIGAN
HARDWOODS AND HEMLOCK.
MILLS ELECTRICALLY
DRIVEN; STOCK
BAND SAWN

Have in Shipping Condition

BIRCH: NO. 2 AND BETTER, 4/4 to 12/4
ASH: NO. 2 AND BETTER, 4/4 to 12/4
ELM: NO. 2 AND BETTER, 4/4 to 12/4
BASSWOOD: NO. 2 AND BETTER, 4/4
to 12/4

WE are well equipped for manufacturing
special sizes, wagon stock, skids, ties, etc.

THE C. A. GOODYEAR LUMBER COMPANY

Office and Mill
TOMAH, WISCONSIN

Logging Camp
BLUE BILL, MICHIGAN

Brown Bros. Lumber Co.

Manufacturers
and Wholesalers

Rhineland, Wis.

1 " No. 1 Com. & Btr. Hard Maple
1 1/4" No. 2 Com. & Btr. Hard Maple
1 1/2" No. 2 Com. & Btr. Hard Maple
2 " No. 1 Com. & Btr. Hard Maple
2 1/2" No. 2 Com. & Btr. Hard Maple
3 " No. 1 Com. & Btr. Hard Maple

DRY STOCK
AND CAN
MAKE
PROMPT
SHIPMENT

We want to move the following air-seasoned stock

5 cars 6/4" No. 2 Com. & Better Birch
3 cars 5/4" No. 2 Com. & Better Birch
1 car 8/4" No. 2 Com. & Better Birch
1 car 8/4" No. 1 Com. & Better Birch
3 cars 4/4" No. 1 Com. Birch
2 cars 4/4" No. 2 Com. Birch

OELHAFEN LUMBER CO.

TOMAHAWK, WISCONSIN

The Tegge Lumber Co.

MILWAUKEE
WISCONSIN

BUYERS OF
ALL KINDS OF

HARDWOOD LUMBER

GET OUR PRICES ON

1 car 1" No. 1 Common & Btr. Red Birch.
10 cars 1" No. 2 Common & Btr. Plain Birch.
5 cars 1" No. 1 and No. 2 Common Plain Birch.
2 cars 1 1/4" No. 2 Common & Btr. Plain Birch.
2 cars 1 1/2" No. 2 Common Plain Birch.

Can ship in straight or
mixed cars with other lumber

ROBBINS LUMBER COMPANY

Rhineland, Wisconsin

SAWYER GOODMAN CO.

MARINETTE, WIS.

Mixed Cars of Hardwood, Bass-
wood, White Pine and Hemlock,
Cedar Shingles and Posts

We make a specialty of White Pine Beveled Siding and
White Pine Finish and Shop and Pattern Lumber

"Three Mills in Indiana" Used to Be the
Slogan. Now There's Only One Left, but It's

The Largest Band Mill in Indiana

"From Toothpicks to
Timbers 60 Feet Long"

PERRINE-ARMSTRONG COMPANY

Fort Wayne, Indiana

VENEERS AND PANELS

KANSAS CITY, MO.

HELENA, ARK.

VENEERS

PENROD WALNUT & VENEER COMPANY

General Offices, KANSAS CITY, MO.

CIRCASSIAN

MAHOGANY

Logs VENEERS Lumber

WE IMPORT

WE MANUFACTURE

All Thicknesses of Mahogany
 Ready for Shipment

RICE VENEER & LUMBER CO.

GRAND RAPIDS, MICH.

KENTUCKY VENEER WORKS

ROTARY CUT
 GUM, POPLAR, OAK

SAWED AND SLICED
 QUARTERED OAK, MAHOGANY

LOUISVILLE, KENTUCKY

You can't afford to be without *The Gibson Tally Book*

when it costs but a dollar, if you want the most convenient and accurate system for tallying lumber.

Hardwood Record :: :: :: Chicago

Hoffman Brothers Company

**Sliced and Sawed, Quartered
 and Plain Red and White
 Oak and Mahogany**

Walnut

Cherry

Ash

Maple

Let us send you Stock List **FORT WAYNE, IND.**

DON'T TRY TO FOOL YOURSELF

**About veneered panels. It will
 cost you dearly in the long-run**

Whenever you begin to figure on manufacturing your own panels for furniture or interior finish, etc., and save (?) the panel manufacturer's profit, you are trying to fool yourself.

Just consider that we have been in business for 25 years. That means long and tried experience—we have long since learned how to make panels at minimum cost.

Specializing in the manufacture of panels—making them in large quantities—we can make better panels cheaper than the consumer can make poor panels.

Again, when you buy panels from us at a given price, you **KNOW** just what they cost. If you make them in small lots, the cost varies and you probably lose money.

We make panels for almost every purpose, in any wood. We shall be pleased to have your specifications.

The Gorham Bros. Company, Mt. Pleasant, Mich.

veneers AND PANELS

Ahnapee Veneer & Seating Co.

HOME OFFICE, FACTORY AND VENEER MILL, ALGOMA, WIS.
VENEER AND SAWMILL, BIRCHWOOD, WIS.

We manufacture at our Birchwood plant single ply veneers of all native northern woods and deliver stock that is in shape to glue.

From our Algoma factory, where we have specialized for twenty years, we produce panels of all sizes, flat or bent to shape, in all woods, notably in Mahogany and Quarter-Sawed Oak.

We make no two-ply stock, and do not employ sliced cut quartered oak. Our quartered oak panels are all from sawed veneer.

Every pound of glue we use is guaranteed hide stock. We do not use retainers. Our gluing forms are put under powerful screws and left until the glue has thoroughly set.

If you seek a guaranteed product that is the best, based on results accomplished by most painstaking attention and study of every detail, combined with the use of the best stock and an up-to-date equipment, our product will appeal to you.

If you are a "price buyer" we probably cannot interest you.

KIEL WOODEN WARE CO.

WHEN IN THE MARKET FOR ROTARY CUT

BIRCH
BASSWOOD
OAK
ASH
ELM

VENEER

Write Us

WISCONSIN

KIEL
FACTORY AND MAIN
OFFICE

MELLEN
VENEER AND HEADING
MILL

PANELS PANELS PANELS

In Stock at Chicago Warehouse, 1140 West Lake Street
Telephone Haymarket 3027

WE WANT TO MOVE BEFORE JANUARY 1

3 PLY GOOD 1 SIDE

3/16 Ash 24 x 60	1/4 Ash 24 x 60	1/4 Basswood 24 x 60
30 x 60	30 x 72	

The Wisconsin Seating Company,

New London, Wis.

HOWARD HANSON, President

THOMAS A. TURNER, Secy. and Treas.

THE HANSON-TURNER COMPANY

MANUFACTURERS OF

ROTARY CUT VENEER AND THIN LUMBER

ELM
BEECH
CURLY BIRCH

OAK
MAPLE

BIRCH
BASSWOOD
BIRD'S-EYE MAPLE

SPECIALTIES:

DRAWER BOTTOMS BACK PANELS CENTER STOCK
BACKING PIANO PIN BLOCKS BIRCH DOOR STOCK
CURLY BIRCH BIRD'S-EYE MAPLE

OFFICE and FACTORY at WELLS, N. Y.

VENEERS AND PANELS

Custom Mill Work, Storage, Inspection **ON** **Foreign Fancy Woods, Mahogany, Cedar, Circassian**

We receive the logs, store or warehouse them, manufacture them into lumber, cut or saw veneers, pile and store the product, and ship via any railroad. Also furnish inspection returns on logs or lumber. Can furnish accommodations and economies which it is impossible to secure elsewhere. We always have on our yards parcels of plain and figured African, Mexican and Cuban Mahogany, Circassian Walnut and Cedar logs, placed here for sale by direct foreign shippers, from which advantageous purchases can be made.

Astoria Veneer Mills & Dock Co.

Long Island City, New York

CHESTNUT DOOR STOCK VENEERS

WE make a specialty of rotary cut Chestnut Door Stock Veneers for one, two, three and five panel doors, and are prepared at all times to fill orders promptly. We make it a point never to substitute brown ash when chestnut is ordered.

¶ We also manufacture door stock veneers in Red and White Oak, Poplar Cross-banding, Drawer Bottoms and special dimension Poplar, White Oak Veneers for furniture and piano makers, and other rotary cut products in Chestnut, Poplar, Red and White Oak not listed above.

¶ For prices and other information write to

RADFORD PORTSMOUTH VENEER CO., Radford, Virginia

Veneers and Panels with a Reputation

WE manufacture Veneers in all the native woods and for all purposes. Also Built-up Panels in native and foreign woods—three and five-ply—and have established a reputation for furnishing high-grade material. Send us your inquiries and orders and become one of our satisfied customers.

Underwood Veneer Co.

Wausau, Wis.

“SOVEMANCO.”

We can furnish anything you want in

Sawed and Sliced Foreign and Domestic Figured Veneers

Capacity 15 million feet per year. Ready to take care of carload orders promptly. Small orders shipped same day received, if desired.

SOUTHERN VENEER MFG. CO., Inc.

Office, 21st and Standard.

LOUISVILLE, KY.

Mills, Magnolia, Standard and 21st Sts

THE SOUTH

PROMINENT SOUTHERN MANUFACTURERS

ANY REASONABLE OFFER

QUARTERED WHITE OAK

5,830' 3/4" 1s-2s.
10,500' 5/4" 1s-2s.
10,800' 6/4" 1s-2s.
8,000' 3/4" No. 1 Com.
20,000' 4/4" No. 1 Com., 10" & up.
57,000' 5/4" No. 1 Com.
4,080' 6/4" No. 1 Com.

45,000' 4/4" No. 2 Common.
5,390' 5/4" No. 2 Common.

PLAIN RED OAK

21,000' 4/4" No. 2 Com. Red and White.

QUARTERED RED OAK

21,000' 4/4" 1s-2s 6" & 7" wide.
10,300' 6/4" No. 1 Com.

WILL BUY THE FOLLOWING STOCK: DRY—IN FINE CONDITION

PLAIN POPLAR

5,000' 4/4" 1s-2s Yellow, 7" & up.
30,000' 6/4" No. 1 Common.
12,000' 4/4" Clear Saps.
21,000' 6/4" Clear Saps.

QUARTERED POPLAR

16,900' 4/4" 1s-2s.
8,000' 4/4" No. 1 Common.

We, of course, have a complete stock of Quartered and Plain Oak, Poplar and Hickory, etc., in all grades and thicknesses, and will be glad to have your inquiries for anything you may need.

J. V. STIMSON & CO.

OWENSBORO, KY.

B. C. JARRELL & CO.

MANUFACTURERS OF

Rotary-Cut Gum and Poplar VENEERS

Well manufactured, thoroughly
KILN DRIED and FLAT

HUMBOLDT, - TENNESSEE

Louisiana Long Leaf Lumber Co.

Fisher, Louisiana

Diamond

4 L Co.

Brand

OAK FLOORING A GUARANTEE OF PERFECTION

IN spite of heavy demands for Tennessee Valley Hardwoods, we have a few items left:

2 cars 4/4 1s and 2s PLAIN RED OAK 10"—wider
4 cars 4/4 No. 1 Common PLAIN RED OAK 10"—wider
2 cars 8/4 1s and 2s PLAIN RED OAK 6"—wider
1 car 8/4 No. 1 Common PLAIN RED OAK 10"—wider
1/2 car 5/4 1s and 2s PLAIN RED OAK 6"—9 1/2"
1/2 car 6/4 1s and 2s PLAIN RED OAK 6"—9 1/2"
4 cars 4/4 No. 1 Common PLAIN WHITE OAK 4"—9 1/2"
3 cars 4/4 No. 1 Common PLAIN WHITE OAK 10"—wider
1 car 6/4 1s and 2s PLAIN WHITE OAK 6"—9 1/2"
1 car 6/4 1s and 2s PLAIN WHITE OAK 10"—wider
1 car 8/4 1s and 2s PLAIN WHITE OAK 6"—wider

The HHH Brand

H. H. HITT LUMBER COMPANY, DECATUR, ALABAMA

DRY STOCK

1 car 10, 12 & 16/4 C & B Plain OAK.
3 cars 4/4 No. 1 Com. Plain OAK.
2 cars 4/4 No. 2 Com. Plain OAK.
1 car 4/4 1s & 2s POPLAR.
1 car 4/4 Sap POPLAR.
3 cars 4/4 No. 1 Com. POPLAR.
2 cars 6/4 No. 1 Com. POPLAR.
3 cars 4/4 Log Run BASSWOOD.
2 cars 4/4 Log Run BUCKEYE.
1 car 8/4 Log Run MAPLE.
1 car 4/4 No. 1 C & B MAPLE.
1 car 5/4 C & B CHESTNUT.

Send Us Your Inquiries

Boice Lumber Co., Inc.
RICHMOND, VIRGINIA

ESTABLISHED 1869

Adams & Raymond Veneer Co.

INDIANAPOLIS, INDIANA
MANUFACTURERS
OF
PLAIN & FIGURED
VENEERS

CIRCIASSIAN } WALNUT
AMERICAN }

QUARTERED OAK



THE SOUTH

PROMINENT SOUTHERN MANUFACTURERS

CHERRY
50 M ft. 4/4
No. 3
Common

CHESTNUT
100,000 feet
of 8/4 Sound
Wormy and
No. 2 Com-
mon.

WE HAVE IT
W. W. DEMPSEY

Manufacturer and
Wholesaler of
HARDWOODS

CYPRESS
250,000 feet
of 4/4 No. 1
Common &
Better, Old
grading.

SPRUCE
4/4 and 8/4
Clear and
Select, 8/4
Box and Mill
Cull

BAND SAWED STOCK

A LINE BRINGS PRICE BY RETURN MAIL

General Offices

Johnstown, Pa.

New York Office

No. 18 Broadway

William S. Whiting

MANUFACTURER AND WHOLESALE

WHITE PINE
BASSWOOD
BIRCH

BUCKEYE
CHESTNUT

MAPLE

POPLAR

OAK

ASHEVILLE, N. C.

A FEW ITEMS OF DRY STOCK

We Want to Move

2 cars 4/4 1st & 2nds Cypress.
2 cars 4/4 select Cypress.
4 cars 4/4 No. 1 Shop Cypress.
1 car 2" 1sts & 2nds Cypress.
1 car 2" Select Cypress.
1 car 4/4 1sts & 2nds Cotton-
wood.
5 cars 3" mixed oak Crossing
Plank.

10 cars 4/4 1sts & 2nds Red Gum.
2 cars 5/4 No. 1 Common Ash.
2 cars 4/4 1sts & 2nds Ash.
1 car 2" 1sts & 2nds Ash.
2 cars 4/4 18" & wider Panel
Cottonwood.
8/4 to 16/4 No. 1 Common and
better Plain Red and White
Oak.

BAKER-MATTHEWS MFG. CO.

SIKESTON, MO.

WRITE US FOR PRICES

Frank Purcell Kansas City
U. S. A.

Exporter of **Black Walnut Logs**



MARK

**FIGURED WALNUT IN LONG WOOD
AND STUMPS**

"WE ARE GETTING RESULTS"

WRITES ONE ADVERTISER

This Means That He Is Getting

NEW BUSINESS

Through His Ad

If we can do it for him is there any logical
reason why we can't for you?

MAKE US PROVE IT

HARDWOOD RECORD, CHICAGO

GARETSON-GREASON LUMBER CO.

1002-1005 Times Bldg.

ST. LOUIS

MANUFACTURERS

Three Mills

**Himmelberger-Harrison
Lumber Co.**

**Specialists
Red Gum**

Mills at
Morehouse, Mo.

Sales Offices
Cape Girardeau, Mo.

Salt Lick Lumber Co.

SALT LICK

KENTUCKY

MANUFACTURERS OF



Oak Flooring

Complete stock of $\frac{3}{8}$ " and $\frac{13}{16}$ " in all
standard widths

BUFFALO

The Foremost Hardwood Market of the East

T. SULLIVAN & CO.

SPECIALTIES:

Gray Elm, Brown Ash

Pacific Coast Fir and Spruce

2 ARTHUR STREET

ORSON E. YEAGER

SPECIALTIES:

Oak, Ash and Poplar

932 ELK STREET

ANTHONY MILLER

**HARDWOODS
OF ALL KINDS**

893 EAGLE STREET

**G. ELIAS & BRO.
HARDWOODS**

White Pine, Yellow Pine, Spruce,
Hemlock, Fir, Lumber, Timber, Mill-
work, Boxes, Maple and Oak Flooring

955-1015 ELK STREET

Kugh McLean Lumber Co.

OUR SPECIALTY:

**QUARTERED
WHITE OAK**

940 ELK STREET

I. N. Stewart & Bro.

Specialties

Cherry and Oak

892 Elk Street

Standard Hardwood Lumber Co.

**OAK, ASH and
CHESTNUT**

1075 Clinton Street

BUFFALO HARDWOOD LUMBER CO.

We want to buy for cash

OAK, ASH AND OTHER HARDWOODS

All grades and thicknesses.
Will receive and inspect stock at shipping point.
Branch yard, Memphis, Tenn.

940 Seneca Street,

BUFFALO

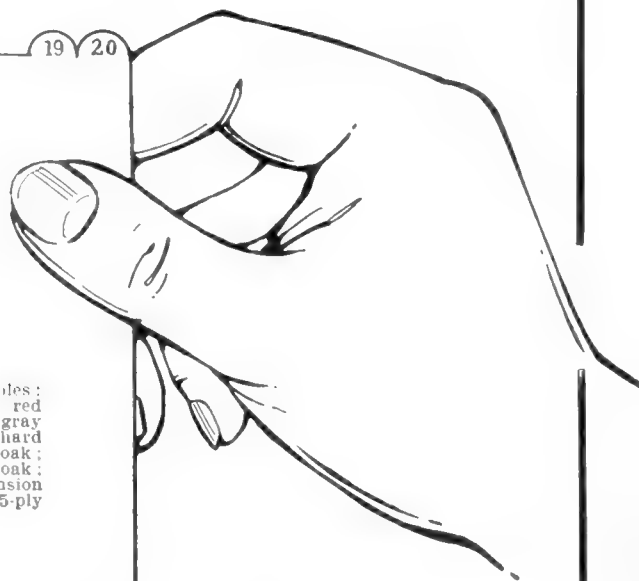
The above firms carry large and well assorted stocks of all kinds and grades of Hardwoods, and have every facility for filling and shipping orders promptly. They will be pleased to have your inquiries.

Doesn't It Look Good To You?

2 4 7 10 11 13 14 15 17 19 20

MICHIGAN, GRAND RAPIDS: Stow & Davis Furniture Company; tables: George A. Davis, buyer; 40,000 feet 4/4 basswood; 15,000 feet 4/4 red birch; 30,000 feet 4/4 sound wormy chestnut; 30,000 feet 4/4 cull gray elm; 30,000 feet 4/4 and 8/4 mahogany; 15,000 feet 4/4 and 6/4 hard maple; 20,000 feet 5/4 and 6/4 soft maple; 25,000 feet 4/4 plain red oak; 75,000 feet 4/4 plain white oak; 200,000 feet 4/4 quartered white oak; 20,000 feet 4/4 poplar; 50,000 feet red gum, all thicknesses. Dimension stock: Buyers of 3x3—30 oak squares. Panel stock: Buyers of 5-ply quartered oak and mahogany table tops.

HARDWOOD RECORD CHICAGO



Specimen of one of the thousands of patented tabbed index cards involved in Hardwood Record's copyrighted Information Service, showing annual requirements for Lumber, Dimension Stock, Veneers and Panels employed by wholesalers and hardwood manufacturing consumers throughout the United States and Canada.

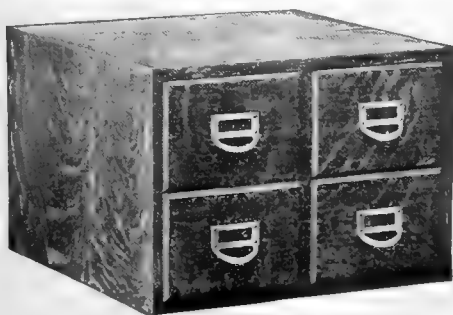


Illustration of Oak Cabinet in which this Information Service is filed.

ILLINOIS

Key

1	Ash	12	Hickory
2	Basswood	13	Mahogany
3	Beech	14	Maple
4	Birch	15	Oak
5	Butternut	16	Walnut
6	Cherry	17	Poplar
7	Chestnut	18	Miscellaneous including
8	Cottonwood		Dogwood, Holly, Locust,
9	Cypress		Persimmon, Sycamore.
10	Elm	19	Dimension stock
11	Gum	20	Veneers and panel stock

Fac-simile of state key card between which the tabbed information cards are filed alphabetically by towns, by means of which instant reference can be made to the buyers of any kind of wood, in any locality in the United States and Canada.

THIS service is comprised in more than fifty bulletins, and additional bulletins of corrections and additions are printed frequently.

This service is kept positively up-to-date, and is indispensable to lumber and veneer sales departments.

It is an exclusive service disposed of only to HARDWOOD RECORD advertisers.

LET US TELL YOU ABOUT THE MODERATE COST

Hardwood Record, 537 South Dearborn Street, Chicago

Vansant, Kitchen & Company

Manufacturers Old-Fashioned Soft Yellow Poplar

5-8 and 4-4
in Wide Stock,
Specialty

Ashland, Kentucky

EASTERN REPRESENTATIVE, John L. Cochran
601 W. 115th Street, New York City

CHICAGO OFFICE, Steger Building
W. H. Matthias, Manager.

HERE IS SOME OF THE STOCK WE HAVE ON HAND FOR PROMPT SHIPMENT:

BASSWOOD

4/4 1s and 2s, 10'-12', 2 cars.
4/4 1s and 2s, 14'-16', 1 car.
4/4 Clear strips, 10'-12', 1 car.
4/4 Clear strips, 14'-16', 1 car.
4/4 No. 1 Common, 10'-12', 2 cars.
4/4 No. 1 Common, 14'-16', 3 cars.

CHESTNUT

4/4 No. 1 Common, 5 cars.
5/4 No. 1 Common, 2 cars.
6/4 No. 1 Common, 3 cars.
8/4 No. 1 Common, 2 cars.
4/4 Quartered No. 2 Com., 5 cars.
8/4 No. 2 Common, 2 cars.

10/4 No. 2 Common, 2 cars.
12/4 No. 2 Common, 3 cars.
4/4 No. 1 Com. strips, 3 cars.

FLOORING

Oak, Beech and Maple.

WHITE PINE

All grades.

ALL BAND SAWED AND OUR OWN MANUFACTURE

W. M. RITTER LUMBER CO., COLUMBUS, OHIO

W. H. White Company Boyne City Lumber Company

Mills and General Office: BOYNE CITY, MICH.

Sales Office: BUFFALO, N. Y.

STOCK DRY—STANDARD GRADES—BEST
MANUFACTURE—CAR OR CARGO SHIPMENTS

WE OFFER

4/4 and 5/4 No. 2 common and better
Basswood

4/4 No. 2 common and better Brown
Ash

4/4 and 5/4 No. 2 common and better
Birch, strictly unselected for color

4/4 and 5/4 No. 1 and No. 2 common
Flooring Maple.

4/4, 5/4, 6/4, 8/4, 10/4, 12/4 and 16/4
Firsts and Seconds Maple

YELLOW POPLAR

MANUFACTURERS OF BAND SAWED

POPLAR
QUARTERED OAK
PLAIN OAK
CHESTNUT
BASSWOOD



SPECIALTY
QUARTER SAWED
WHITE OAK

Coal Grove, Ohio, U. S. A.

LUMBER CO.

Aardwood Record

Eighteenth Year,
Semi-Monthly.

CHICAGO, DECEMBER 25, 1912

{ Subscription \$2.
Single Copies, 10 Cents.

LARGEST VENEER PLANT IN THE WORLD

C. L. WILLEY

MANUFACTURER OF

MAHOGANY, VENEER

HARDWOOD LUMBER

OFFICE, FACTORY AND YARDS:

2558 South Robey Street

Telephone Canal 930

BAND MILLS, MEMPHIS, TENN.

CHICAGO

W A N T E D

All Kinds of High-Grade

HARDWOODS

S.E. SLAYMAKER & CO.

Representing
WEST VIRGINIA SPRUCE LUMBER CO.,
Cass, West Virginia.

Fifth Ave. Bldg.,
NEW YORK

On the Following Stock We Will Make Special Prices for
Prompt Shipment:

62000 ft. 1 1/2" No. 2 Common Poplar.	522000 ft. 1 1/2" S. W. and No. 2 Com. Chestnut.
91000 ft. 2" No. 2 Common Poplar.	40000 ft. 1x12" and up No. 1 and 2 Chestnut.
10000 ft. 1 1/4" No. 1 and 2 Qtd. Poplar.	49000 ft. 1" No. 1 Common Chestnut.
45000 ft. 1x24" and up No. 1 and Panel Poplar.	33000 ft. 1 1/4" No. 1 Common Chestnut.
30000 ft. 3x8 to 20 No. 1 and 2 Poplar.	41000 ft. 1 1/2" No. 1 Common Chestnut.
15000 ft. 4x18 and up No. 1 and Panel Poplar.	32000 ft. 2" No. 1 Common Chestnut.
55000 ft. 5 8x18" and up No. 1 and Panel Poplar.	45000 ft. 1 1/2" No. 2 Common Plain Oak.
151000 ft. 1" S. W. and No. 2 Com. Chestnut.	198000 ft. 2" No. 2 Common Plain Oak.
69000 ft. 1 1/4" S. W. and No. 2 Com. Chestnut.	60000 ft. 1 1/2" No. 1 Common Plain Oak.

THE ATLANTIC LUMBER CO.

70 Kilby St., Boston, Mass.

Keys-Walker Lumber Co.

Manufacturers

West Virginia Hardwoods

Soft Yellow Poplar

Oak—Chestnut—Bass—Hemlock, Etc.

Rough or Dressed

Write for Prices

ROANOKE, VIRGINIA

ICHABOD T. WILLIAMS & SONS

Foreign and Domestic Woods In Logs, Lumber and Veneers

11th Ave. and 25th Street
NEW YORK

910 So. Michigan Avenue
CHICAGO

Hadentine Lumber Co.

Incorporated

Office: Camden, N.J.

For Immediate Shipment

4/4 No. 2 Common and 4/4 Log Run Hard Maple, 4/4 No. 1 and 2 Chestnut and 4/4 No. 1 and 2 and No. 1 Common Cherry, 8/4 Log Run Soft Maple, 8-12/4 Log Run Hard Maple.

MOST EVERYTHING IN SPRUCE

Mills' Annual Cut, 200 Millions

Planing Mill Facilities

PROCTOR **VENEER DRYER** FIREPROOF
—AN—
UNPARALLELED SUCCESS

No
Splitting
Nor
Checking
No
Closing
Nor
Adjoining



Recommended by
all those
who
have tried
it

THE PHILADELPHIA TEXTILE MACHINERY COMPANY
DEPT. L HANCOCK & SOMERSET STS. PHILA PA.

Don't Delay Placing Your Lumber Orders

There's always danger of disappointment when you let the order go until just a few days before you require the lumber; transportation is not always reliable and no matter how prompt the shipment, you run a risk.

However, it is one of the strong points of the McILVAIN Service to make prompt shipments, and RUSH orders are always given the attention they demand.

So let us talk Lumber with you, and bid on your specifications.

J. GIBSON McILVAIN & Co.
1420 Chestnut Street **PHILADELPHIA**

"Git aplenty while yer agittin'," said the Hoosier Schoolmaster, and it is sound advice to any one who invests in a natural resource such as

Pacific Coast Timber

Get your plenty from a concern with a record of success covering thirty-two years; from one that has perfected an efficient timber handling organization; from one that has the experience, the knowledge and the enterprise to select tracts of timber that are right for your purpose.

We furnish our clients with complete, dependable information regarding the timber we offer. Our reports are reliable. They are the basis upon which bond issues, aggregating millions of dollars, have been issued and upon which millions of dollars have been invested by those who demand the best and from which investments millions of dollars in profit have been made.

James D. Lacey & Company

TIMBER LAND FACTORS

1215 Old Colony Bldg.
CHICAGO

1104 Spalding Bldg.
PORTLAND

1009 White Bldg.
SEATTLE

MICHIGAN

FAMOUS FOR HARD MAPLE AND GREY ELM

Michigan Hardwoods

MANUFACTURED BY

COBBS & MITCHELL, Inc.

CADILLAC, MICH.

November 26th, 1912

DRY STOCK LIST

4/4 Basswood No. 1 Common.....	100 M
4/4 Birch 1s & 2s Red Curly and Wavy.....	12 M
4/4 Cherry No. 3 Common & Better.....	9 M
4/4 Cadillac Gray Elm 1s & 2s.....	20 M
4/4 Cadillac Gray Elm No. 1 Common.....	47 M
4/4 Cadillac Gray Elm No. 2 Common.....	60 M

"It is not what lumber costs you, so much as what you can get out of it, that decides its value for your work."

OUR OWN MANUFACTURE

W. D. YOUNG & CO.

MANUFACTURERS

FINEST MAPLE FLOORING

KILN DRIED, HOLLOW BACKED
MATCHED OR JOINTED
POLISHED AND BUNDLED

Hard Maple, Beech and Birch Lumber

1 TO 6 INCHES THICK

WRITE FOR PRICES

BAY CITY, MICH. MICHIGAN

Something New For Your Factory Floors

Utility Joined With Economy

We are now manufacturing what we call a No. 2 Factory grade of Hardwood Flooring which can be used successfully in factory buildings where good wearing qualities rather than appearance are required. This Flooring is made from the hardest portion of the log, and while the Flooring shows the heart defect to a considerable extent, nevertheless it will wear with wonderful durability. It is "Rockhard" flooring at a rock bottom price.

It is 13/16 x 2 1/4" face, and the Flooring is kiln dried, hollow backed, bored, end matched, steel scraped and bundled.

Write us about it. This is a grade of Hardwood Flooring you should know about. Address MITCHELL BROTHERS COMPANY, Sales Department, CADILLAC, MICHIGAN.

THE Kneeland-Bigelow Co.

300,000 Feet

5/4 No. 2 Common and Better Beech

HARDWOOD MANUFACTURERS

250,000 ft. 5/4 No. 1 Common Basswood

This is of good average widths and lengths, containing a large percentage of 16 ft.

All of the above stock is nicely manufactured, being hand sawed, trimmed, and well seasoned. We are prepared to quote attractive prices for this material for immediate shipment.

BAY CITY, MICH.

CHICAGO

THE GREATEST HARDWOOD MARKET IN THE WORLD

HARDWOOD AND YELLOW PINE LUMBER

***In Stock, Ready
To Ship***

3 cars 1x6 and wider 1st & 2nd Cottonwood
3 cars 1x9 to 12" Cottonwood Box Boards
4 cars 1" No. 1 Common Cottonwood
4 cars 1" No. 1 Common Sap Gum

WE make
a spe-
cialty of Oak
Timber and
Car Stock.

WRITE US FOR PRICES ON YELLOW PINE TIMBER, FLOORING, CEILING AND FINISHING.
SCHULTZ, HOLLOWAY CO., 343 South Dearborn Street, CHICAGO

J. RAYNER VENEERED PANELS

ALL WOODS
SEND FOR STOCK LIST

MAHOGANY LUMBER

CARROLL AVE. AND SHELDON ST.
CHICAGO

Estabrook-Skeeel Lumber Co.

MANUFACTURERS AND DEALERS IN

Maple, Birch, Elm, Basswood, Ash
And Other Northern Hardwoods

In the Market for Round Lots of Hardwood

WRITE US BEFORE SELLING

Fisher Building, CHICAGO

PHONE HARRISON 1984



A floor to adore

For thirty-three years Wilce's Hardwood Floor-
ing has been among the foremost on the market
and because it stands today "unequaled" is the
best evidence that its manufacturer has kept
abreast of modern methods and the advanced de-
mands of the trade. To convince yourself of the
above statements, try our polished surface floor-
ing, tongued and grooved, hollow backed, with
matched ends and holes for blind nailing—you'll
find it reduces the expense of laying and polishing.
Our Booklet tells all about Hardwood Flooring
and how to care for it—also prices—and is free.

The T. Wilce Company

22nd and Throop Sts. CHICAGO, ILL.

Going up—Hardwood Timber

We have the following hardwood and pine timber for sale at prices
that have not as yet been advanced with the rise in value on
timber lands. For a short time we offer—

**150,000,000 FEET HARDWOOD IN SOUTHEAST
ARKANSAS—A SPLENDID OPPORTUNITY.**

**7,600,000 FEET OF HARDWOOD IN SOUTH-
WEST ARKANSAS**

We also have timber in British Columbia and on the Pacific Coast
and Oregon.

For further particulars, address

John C. Spry

Room 1003 Harris Trust Bldg.,

Chicago, Illinois

SAVE YOUR MONEY BY USING THE

RED BOOK Published Semi-annually in February and August

It contains a carefully prepared list of the buyers of lumber in
car lots, both among the dealers and manufacturers.

The book indicates their financial standing and manner of meet-
ing obligations. Covers the United States, Alberta, Mani-
toba and Saskatchewan. The trade recognizes this book as
the authority on the lines it covers.

A well organized Collection Department is also operated and the same is open to
you. Write for terms.

Lumbermen's Credit Assn., ESTABLISHED 1878

608 So. Dearborn St.
CHICAGO

Mention This Paper.

116 Nassau Street
NEW YORK CITY

SECURE BETTER PRICES

AT LESS SELLING COST BY REACH-
ING MORE CUSTOMERS. HARDWOOD
RECORD PUTS YOU BEFORE THEM
ALL TWICE A MONTH.

ASK US ABOUT IT

How's This for a 1913 Platform?

"Resolved, That I will give to the purchase of my lumber the same discriminating care that I devote to manufacturing it into the finished product and distributing it to the trade in which I am interested.

"Resolved, That in ordering hardwood and veneer stocks I will remember the truthful saying that a man gets just about what he pays for, and that cheap lumber is usually cheap lumber.

"Resolved, That I will deal with concerns which have shown themselves to be square and honest in their dealings with me; with which I have no friction as to measurement or grade; which have the facilities for taking care of my orders, and which can fill orders promptly with material sufficiently aged to insure satisfactory use in my factory.

"Resolved, That I keep tab exactly on the results experienced in working lumber purchased from different concerns, to as great a degree as practicable, with the end of determining which of them have justly earned my permanent business."

We recommend the adoption of these resolutions for 1913 by every hardwood lumber buyer in the country. Our reason, to be perfectly frank, is this: It would mean a lot of new business for

The Louisville Hardwood Club

EDWARD L. DAVIS LUMBER COMPANY
OHIO RIVER SAWMILL COMPANY
NORMAN LUMBER COMPANY
BOOKER-CECIL COMPANY

LOUISVILLE POINT LUMBER COMPANY
W. P. BROWN & SONS LUMBER COMPANY
THE LOUISVILLE VENEER MILLS
C. C. MENGEL & BRO. CO.

KNOXVILLE

Famous for Finest Type of Poplar, Oak and Chestnut

VESTAL LUMBER AND MANUFACTURING CO. KNOXVILLE, TENNESSEE.

QUARTERED WHITE OAK OUR SPECIALTY

MANUFACTURERS OF
QUARTERED WHITE OAK, PLAIN OAK, POPLAR, WALNUT & TENNESSEE RED CEDAR LUMBER
BAND MILLS AT VESTAL, A SUBURB OF KNOXVILLE. SOUTHERN AND LOUISVILLE & NASHVILLE RAILROAD

H. S. MIZNER,
Pres.

C. C. CANNON,
Vice-Pres.

J. M. LOGAN,
Gen'l Manager

C. R. SWANN,
Sec'y and Treas.

LOGAN-MAPHET LUMBER CO.

MANUFACTURERS AND WHOLESALERS
HARDWOODS AND PINE
POPLAR A SPECIALTY

Main Office and Yards: Knoxville

Branch Office and Yard:

Bank and McLean Ave., Cincinnati I. M. ASHER, Mgr.

We Want Orders for the following Dry Stock:
WHITE OAK—Plain or Quartered.

RED OAK—Plain or Quartered.

CHESTNUT

BASSWOOD

POPLAR

WHITE PINE

Always carry large well
assorted stock of all
kinds of Hardwoods.

CAN SHIP ON SHORT NOTICE.

Maphet & Shea Lumber Co.

Manufacturers and Wholesalers

OFFICE: 703-705 HENSON BUILDING

Yard: Middlebrook Pike and
Lonsdale Car Line

KNOXVILLE, TENN.

WE WANT TO MOVE

3 cars 4/4 No. 1 Common Poplar, 7" & up
2 cars 4/4 Clear Sap Poplar, 7" & up
1 car 4/4 Select Poplar, 7" & up
1 car 4/4 1 & 2 Red Oak, 10" & up
1 car 4/4 1 & 2 Chestnut
1 car 4/4 No. 1 Common Chestnut

We manufacture: YELLOW POPLAR,
OAK, CHESTNUT, WHITE AND YEL-
LOW PINE, HEMLOCK BARK, ETC.

BAND AND CIRCULAR MILLS—EAST TENN.
MOUNTAIN VIRGIN HARDWOOD STUMPAGE

Kimball & Kopcke Knoxville, Tennessee

Manufacturers and Shippers of

Appalachian Hardwoods

OAK OUR SPECIALTY

"THE VERY BEST" Red Birch

Knoxville Veneer Co.

P. B. RAYMOND, General Manager, Knoxville, Tenn.

NASHVILLE

CELEBRATED FOR HIGHEST TYPE TIMBER GROWTH, FAULTLESS
MANUFACTURE AND GOOD GRADES.

If you want to get in touch with 2000 Live Wire Buyers of Hardwoods

it will pay you to find out about
the Hardwood Record's

BULLETIN SERVICE

One man, who uses the service
gives it credit for earning annu-
ally \$10,000 for him.

Write for pamphlet—

"Selling Lumber By Mail"

It will prove a revelation to you.

HARDWOOD RECORD

(Bulletin Dept.)

537 So. Dearborn St.,
CHICAGO

We will name very attractive
prices on a few cars of each of the
following items:

4/4, 6/4, 10/4 and 12/4 1s and 2s Poplar.
4 4 and 8 4 Sap Poplar.
1 1/4", 1 1/2" and 2 1/2" No. 1 Common Poplar.
4/4 No. 1 and Panel Poplar in widths of 12 to 17", 18 to 23"
and 24" and up.
4 1/4 x 13 to 17" Poplar Box Boards.
4/4 1s & 2s Basswood or Linn—very fine.
3/8, 4/4, 5/4, 10/4 and 12/4 1s & 2s Qtd. W. Oak.
4/4, 5/4, 6/4 and 8/4 No. 1 Common Qtd. W. Oak.
6 4 1s & 2s Qtd R. Oak.
4/4, 5/4 and 6/4 No. 1 Common Qtd. R. Oak.
6/4 and 10/4 1s & 2s Hickory.
4/4, 6/4, 10/4 and 12/4 No. 1 Common Hickory.
4/4, 6/4, 8/4, 10/4 and 12/4 No. 2 Common Hickory.
4/4 1s & 2s Chestnut, also 5, 6 and 8/4.
4 4 No. 1 Common Chestnut.

John B. Ransom & Co.

MANUFACTURERS OF

Hardwood Lumber

Nashville, Tenn.

IF YOU BUY LUMBER

Naturally you want only well manufactured stock, clean
grades and prompt service. We can give you all three.

We have a well assorted stock of **Plain** and
Quartered Red and **White Oak**, **Poplar**, **Ash**,
Chestnut, **Hickory** and **Aromatic Tennessee**
Red Cedar, practically all of which is our
own manufacture.

LOVE, BOYD & CO., Nashville, Tenn.

Cherokee Lumber Co.

Manufacturers of all the lumber we sell.
Let us quote you some attractive prices
on quartered white oak and poplar.
Any grades and thicknesses.

NASHVILLE, TENN.

Tennessee Hardwoods

Tennessee Hardwood
Lumber Co.

West Nashville

Q The Gibson Aluminum Tally Book Cover
and Tally Tickets are now employed by
more than 2,000 lumber manufacturers,
dealers and consumers.

LAMB-FISH LUMBER CO.



Band Mill and General Offices
CHARLESTON, MISS.
THE LARGEST HARDWOOD MILL IN THE WORLD
ANNUAL CAPACITY, 40,000,000
STOCK LIST—Dry Lumber on Hand December 1, 1912

TELEGRAPH
 CODES
 UNIVERSAL
 HARDWOOD
 WESTERN UNION
 Cable Address, Lamb

	3 8	1 2	5 8	3 4	4 4	5 4	6 4	8 4	10 4	12 4	16 4
FAS Qrtd. White Oak.....	6,000	60,000	20,000	30,000	30,000	.....	7,000	.....	.....	.....	.....
No. 1 Com. Qrtd. White Oak.....	.....	12,000	.....	16,000	150,000	.....	.....	.....	.....	.....	.....
No. 2 Com. Qrtd. White Oak.....	.....	5,000	.....	.....	10,000	.....	.....	.....	.....	.....	.....
FAS Plain White Oak.....	30,000	100,000	120,000	60,000	.....	40,000	.....	4,000	3,000	.....	2,000
No. 1 Com. Plain White Oak.....	.....	.....	40,000	12,000	150,000	5,000	.....	3,000	9,000	.....	.....
FAS Plain White Oak, 12" & up.....	.....	.....	.....	4,000	.....	.....	.....	.....	.....	.....	.....
FAS Plain Red Oak.....	.....	.....	30,000	20,000	150,000	.....	.....	.....	.....	.....	1,000
No. 1 Com. Plain Red Oak.....	.....	.....	18,000	25,000	50,000	.....	18,000	1,000	.....	.....	.....
FAS Red Gum.....	200,000	150,000	110,000	250,000	220,000	40,000	60,000	40,000	.....	3,000	.....
FAS Circassian Red Gum.....	.....	.....	12,000	20,000	.....	.....	3,000	1,000	.....	.....	.....
No. 1 Com. Red Gum.....	60,000	20,000	130,000	40,000	50,000	50,000	20,000	8,000	.....	.....	.....
FAS Sap Gum, 18" & up.....	.....	.....	.....	80,000	.....	.....	.....	.....	.....	.....	.....
FAS Sap Gum, 6" & up.....	100,000	40,000	20,000	50,000	.....	15,000	10,000	10,000	.....	.....	.....
No. 1 Com. Sap Gum.....	.....	.....	100,000	150,000	200,000	40,000	.....	.....	.....	.....	.....
No. 2 Com. Sap Gum.....	50,000	30,000	25,000	100,000	.....	200,000	15,000	.....	.....	.....	.....
Shop & Better Cypress.....	.....	.....	.....	.....	15,000	.....	.....	30,000	.....	.....	.....
Log Run Elm.....	.....	.....	.....	.....	60,000	.....	.....	.....	.....	.....	.....
Com. & Btr. Tupelo.....	.....	.....	.....	.....	40,000	.....	.....	.....	.....	.....	.....

OUR LUMBER CONTAINS ALL WIDE STOCK PRODUCED IN MANUFACTURING AND WILL RUN OVER 50% OF 14 AND 16 FT. LENGTHS. WE ALSO MANUFACTURE OAK TIMBERS AND BRIDGE PLANK—FACILITIES FOR KILN DRYING AND DRESSING

“STEARNS” QUALITY LUDINGTON

HARDWOOD SPECIALISTS

LAST CALL FOR DRY STOCK

IF YOU PLACE YOUR ORDERS
 NOW WE CAN SHIP PROMPTLY
 BEFORE BAD WEATHER SETS IN

SEND US YOUR INQUIRIES FOR

4-4 to 16-4 Michigan Soft Gray Elm

The **STEARNS**
 SALT & LUMBER CO. LUDINGTON, MICH.

BAND SAWN HARDWOODS

WE PRODUCE OUR OWN STOCKS

OAK—Plain and Quartered, Red and White

COTTONWOOD—Ash, Southern Elm, Gum, Soft Maple

A FEW ITEMS WE WANT TO MOVE:

100,000 feet 5/4" x 13" to 17" 1sts & 2nds Cottonwood.
 110,000 feet 4/4" x 22" & up No. 1 & Panel Cottonwood.
 200,000 feet 4/4" x 13" to 17" Cottonwood Box Boards.
 75,000 feet 4/4" 1sts & 2nds Quartered White Oak.
 97,000 feet 4/4" No. 1 Common Quartered White Oak.
 115,000 feet 4/4" 1sts & 2nds Red Gum.
 200,000 feet 4/4" to 8/4" No. 1 Shop & Better Cypress.

WRITE US FOR PRICES

ANDERSON-TULLY COMPANY
HARDWOOD LUMBER **Memphis, Tenn.**

FOR SALE = \$15,000

Imperial Spoke and Rim Plant

Equipment, Machines, Tools,
 Furnishings and All Supplies

Dyersburg, Tennessee

THIS PROPERTY INVENTORIES \$27,000

TERMS: CASH . . . \$10,000
 NOTES . . . \$ 5,000

Payable \$1,000 Annually

OFFER GOOD UNTIL DECEMBER 25, 1912

ADDRESS QUICK

Durant-Dort Carriage Co., Owners
FLINT, MICHIGAN

Wausau

"The Place for Wood-Using Factories"

WAUSAU has a large tributary supply of Hemlock, Tamarack, Pine, Cedar, Birch, Basswood, Hard and Soft Maple, Rock and Soft Elm, Ash and other timber.

CENTRALLY LOCATED, with good freight service in all directions, dependable labor, cheap electric power, suitable factory sites, healthful climate, and the best of living conditions. **WAUSAU** offers excellent facilities for the manufacture and shipment of:

Hubs	Toothpicks
Dowels	Silos
Vehicle Parts	Last Blocks
Tanks	Kitchen Cabinets
Handles	Sporting Goods
Refrigerators	Woodenware

Let us send you our booklets, "Wausau, a Good Place to Come," and "Factory Facilities in Wausau." Please ask for them on your business letterhead.

The Wausau Advancement Association
 Wausau, Wisconsin

WEST VIRGINIA

WHERE THE BEST HARDWOODS GROW

West Virginia Timber Company

POPLAR, OAK,
CHESTNUT AND BASSWOOD
LUMBER.
BELL OAK, HEMLOCK, CHAIR
AND
DIMENSION STOCK.

CHARLESTON, W. VA.

30,000 ft 4/4 Clear Saps Poplar.
50,000 ft. 4/4 No. 1 Common & Selects Poplar.
100,000 ft. 4/4 No. 2 "A" Common Poplar.
50,000 ft. 5/4 No. 1 Common Poplar.
50,000 ft. 6/4 No. 1 Common Poplar.
15,000 ft. 4/4 x 13-17" Poplar Box Boards.
17,000 ft. 4/4 x 9-12" Poplar Box Boards.
15,000 ft. 4/4 x 24 and up Panel & Wide Poplar.

20,000 ft. 6/4 No. 1 Common & Better Chestnut.
15,000 ft. 5/4 Log Run Basswood.
90,000 ft. 4/4 1sts & 2nds Red Gum.
75,000 ft. 4/4 No. 1 Common Red Gum.
50,000 ft. 4/4 1sts & 2nds Sap Gum.
60,000 ft. 4/4 Selects & Better Cypress.
50,000 ft. 4/4 No. 1 Common & Shop Cypress.
40,000 ft. 4/4 No. 2 Common Cypress.
25,000 ft. 8/4 No. 2 Common & Pecky Cypress.

Peytona Lumber Company Inc.

WHOLESALE MANUFACTURERS

HARDWOOD LUMBER

HUNTINGTON, W. VA.

Yellow Poplar, Basswood, Chestnut, Oak, Ash

BAND MILL AND YARDS,
1st Ave. and 20th to 24th Sts.

10 cars 4/4 Select & No. 1 Com. Poplar (50% Selects,
60% 14' & 16' long).
4 cars 4/4 13" to 17" Poplar Box Boards (75% 14' &
16').
2 cars 4/4 No. 1 Panel Poplar, 18" to 23" (60% 14'
& 16').
1 car 4/4 No. 1 Panel Poplar, 24" & up (60% 14' & 16').

All high-grade band sawn stock. Good widths.

WE MANUFACTURE AND
DEAL IN

TIES, HARDWOOD LUMBER AND TIMBER

We want to buy a large
amount of 4/4, 8'—8'6"
Oak from Tie Sides

Hill Bros. Tie & Lumber Company
Charleston, W. Va.

Boice Lumber Co., Inc.

Southern Hardwoods

MAIN OFFICE
RICHMOND, VIRGINIA

Yards: NORFOLK, ABINGDON, GRAHAM, VA.,
and NORTH WILKESBORO, N. C.



CINCINNATI

THE GATEWAY OF THE SOUTH



MOWBRAY & ROBINSON

SPECIALISTS IN

OAK—ASH—POPLAR

ALWAYS IN THE MARKET FOR
ROUND LOTS OR MILL CUTS

OFFICE AND YARDS
SIXTH ST., BELOW HARRIET

CINCINNATI

The Maley, Thompson & Moffett Co.

Veneers, Mahogany and Hardwood Lumber

Largest Stocks

Best Selections

CINCINNATI, OHIO

W. E. HEYSER, President WEAVER HASS, V. President
BENJAMIN BRAMLAGE, Sec'y & Treas.

The W. E. Heyser Lumber Company

MAIN OFFICE & YARDS
Winton Place
Cincinnati, Ohio

BRANCH YARDS AND MILLS
West Virginia, Mississippi, Arkansas & Kentucky

12,000,000 ft. High Shipments made
Grade West Vir- direct from our
ginia and Southern own yards and
Hardwoods in mills in straight or
stock at all times. mixed cars.

SEND US YOUR INQUIRIES

OHIO VENEER COMPANY

OFFICE AND MILLS:

2624-2634 Colerain Avenue
CINCINNATI OHIO

WE OFFER THE FOLLOWING VENEER FOR SALE:

600,000 ft. 1/28" Cut Circassian Walnut Veneer
1,500,000 ft. 1/28" Slice Cut Figured African Mahogany
Veneer
100,000 ft. 1/24" Slice Cut Figured African Mahogany
Veneer
125,000 ft. 1/20" Sawed Mexican Mahogany Veneer
200,000 ft. 1/20" Sawed Quartered White Oak Veneer
280,000 ft. 1/20" Slice Cut Quartered White Oak
Veneer
150,000 ft. 1/28" Slice Cut Quartered White Oak
Veneer
350,000 ft. 1/28" Slice Cut Figured Gum Veneer
50,000 ft. 1/28" Slice Cut Quartered Sycamore
600,000 ft. Slice Cut African Mahogany Crotch Veneer
70,000 ft. Cut Bird-Eye Maple Veneer

C If you are not a subscriber
to **HARDWOOD REC-
ORD** and have a suspicion that
you would like to see a copy, it
is yours for the asking.

BENNETT & WITTE

JUST A FEW OF OUR SPECIALS

1 car 4/4" No. 1 & Panel Sap Gum, 21" to 25".
2 cars 4/4" 1 & 2 Red Gum, 18" to 27".
3 cars 4/4 No. 1 Com. Qrtd. Red Oak.
2 cars 4/4 1 & 2 Pl. Red Oak, 12" & up.
1 car 4/4 No. 1 Com. Qrtd. White Oak.
1 car 12/4 1 & 2 Pl. White Oak.
2 cars 4/4" Sd. Wrmy. & No. 2 Com. Qrtd. Chestnut.
3 cars 4/4 1 & 2 Poplar.
1 car each 12/4" No. 1 Com. Selects & 1 & 2 Poplar.
1 car each 4/4 No. 1 Com. & 1st & 2nds Ash.
1 car 4/4, 5/4 & 6/4 1 & 2 Ash, 12" & up wide.
1 car 8/4", 10/4, 12/4 & 16/4" 1 & 2 Ash, 12" & up wide.

Main Office
CINCINNATI, OHIO
222 W. 4th Ave.

SOUTHERN OFFICE, MEMPHIS, TENN.
EXPORT OFFICE, NEW ORLEANS, LA.

CINCINNATI

THE GATEWAY OF THE SOUTH

FOR QUICK SHIPMENT

5 cars 4/4" Sap & Sel. Poplar.
 5 cars 6/4" No. 1 Common
 Poplar.
 4 cars 4/4" 1s & 2s Plain
 White Oak.
 4 cars 5/4" 1s & 2s Plain
 White Oak.
 1 car 6/4" 1s & 2s Plain
 White Oak.

5 cars 4/4" No. 1 Com. Plain
 White Oak.
 4 cars 5/4" No. 1 Com. Plain
 White Oak.
 2 cars 6/4" No. 1 Com. Plain
 White Oak.
 1 car 8/4" No. 1 Com. Plain
 White Oak.

All the above stock Thoroughly Dry, Band Sawn and Equalized

GET OUR PRICES

KENTUCKY LUMBER COMPANY

CINCINNATI, OHIO

WE WANT TO BUY

1", 1 1/4", 1 1/2" 1s & 2s AND NO. 1 COMMON SAP GUM
 1", 1 1/2" & 2" 1s & 2s AND NO. 1 COMMON RED GUM
 1" NO. 1 COMMON TUPELO.

SUBMIT US YOUR STOCK SHEETS
 WITH BEST CASH PRICES

DUHLMEIER BROS.
 CINCINNATI, OHIO

L. W. RADINA & CO.

DEALERS IN

POPLAR AND HARDWOODS

CINCINNATI : : OHIO

ARE YOU ALIVE

to the "Service" (in all its details) you can
 secure from us on Oak, Gum, Poplar and
 other Hardwoods?

BETTER GET IN TOUCH WITH US

THE M. B. FARRIN LUMBER CO.
 CINCINNATI, OHIO

E. C. Bradley Lumber Co.

705-706 Gerke Building, Cincinnati, Ohio

20,000' 4/4 1's & 2's Cherry. 4 cars 3" No. 1 Common & Bet-
 15,000' 4" No. 1 Common & Bet- ter Hard Maple.
 6 cars 4/4 Log Run Hard Maple.
 6 cars 4/4 No. 2 Common Hard Maple.

ABOVE IS ALL WEST VIRGINIA STOCK.

2 cars 4/4 1's & 2's Yel. Poplar. 1 car 4/4 No. 1 Panel Poplar 24"
 1 car 3" No. 1 Common & Bet- & up.
 Yellow Poplar. 2 cars 4/4 Log Run Beech.
 2,000' 4" No. 1 Common & Better 10,000' 4/4 Log Run Cherry.
 Yellow Poplar. 2,500' 5/4 No. 1 Common & Bet-
 1 car 8/4 No. 2 Com. Buckeye. ter Cherry.

All of the above is band sawed, good widths and lengths,
 and we can make prompt shipment

WE WOULD IF WE COULD, BUT WE CAN'T **DEFIANCE** WOODWORKING MACHINES

Could not be built better, no matter how much time was spent in their perfection. No better material could be used in their construction, for we buy the best the market affords. Skilled labor of the highest grade and cost is employed to complete their absolute perfection.

THE RIGHT VISIBLE EXPRESSION

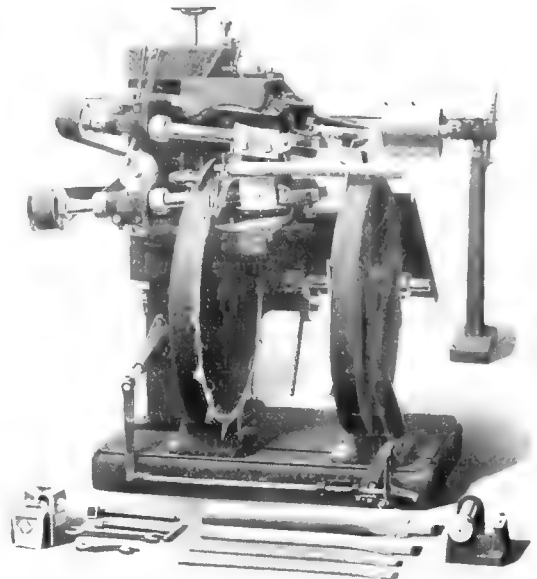
In the finished product of our tools is always of the most satisfactory nature. Possessed of all the positive qualities of extreme intrinsic value, their superiority and distinctive advantages cannot in any way solicit a comparison.

They are a necessary and indispensable means for the up-building of every organization and serve as the practical means for increased efficiency. Let us get in touch with you by your request for our new No. 200 Catalog. It's well worth your time.

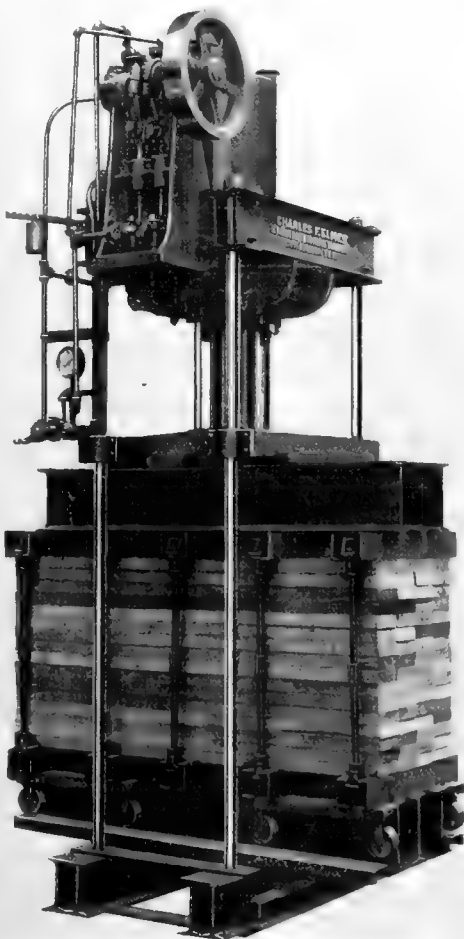
THE DEFIANCE MACHINE WORKS

414 Perry Street, Defiance, Ohio

"THE IMPRINT OF SATISFACTION"



No. 1 Patent Double Spoke Throating Machine



Elmes' Presses are Better

DONE IN A MINUTE

ASK FOR Elmes' latest in hydraulic veneer presses, pumps and retainers—a labor saver, highest in production and quality. You can get full pressure in less than one minute, and in less than one-quarter minute you can be back in position ready for another pressing.

Press and pump self-contained (with or without motor) with tank, valve, gauge, and all fixtures attached and mounted on top of press.

The base and platen are extra heavy and planed smooth. The piston and cylinder are of semi-steel and the piston is water-ground.

Pump frame, base and guide for plunger are cast in one piece, making the pump rigid and comparatively indestructible.

Four-way valve of bronze, operated with one handle.

No low pressure pump is required, as cylinder is filled automatically.

The pumps and manifold are of bronze, and plungers are made of tool steel, hardened and ground. The crank shaft and eccentric are made in one piece, extra heavy. Eccentric straps are babbitted and bored.

Our retainer rods have the best quick release. They can be tightened or released without the use of a wrench, and without fear of breakage.

With one press you can easily handle 100 packages a day.

A comparison will convince you that Elmes' presses are better.

50 years' experience in hydraulic press building.

Charles F. Elmes Engineering Works

228 N. MORGAN ST.

CHICAGO, U. S. A.

THE EAST

BOSTON

NEW YORK

PHILADELPHIA

WM. WHITMER & SONS

INCORPORATED

 Manufacturers and Wholesale-
salers of All Kinds of

 "If Anybody Can,
We Can"

HARDWOODS

 West Virginia Spruce and Hemlock
Long and Short Leaf Pine Virginia Framing

Franklin Bank Bldg.

PHILADELPHIA

Willson Bros. Lumber Co.

MANUFACTURERS

WEST VIRGINIA HARDWOODS

Oliver Building

PITTSBURG, PA.

WHITE OAK { 6x6 to 12x12
BILL TIMBERS { 10 to 20 ft.

ALSO BRIDGE PLANK

J. S. KENT COMPANY PHILADELPHIA
**PROMPT
SHIPMENT**

 1 car 4/4 No. 1 Com. and Saps Poplar.
2 cars 4/4 No. 2 Com. & Better Hard Maple.
2 cars 8/4 Log Run M. C. O. Soft White Pine.
2 cars 5/4 Log Run M. C. O. Basswood.

DANIEL B. CURLL, Real Estate Trust Bldg., PHILADELPHIA
PALMER & PARKER CO.

 TEAK **MAHOGANY** EBONY
ENGLISH OAK **VENEERS** DOMESTIC
CIRCASSIAN WALNUT **HARDWOODS**
103 Medford Street, Charlestown Dist.
BOSTON, MASS.

BEECHER & BARR
OAK CHESTNUT POPLAR

 WHITE PINE, YELLOW PINE AND HEMLOCK
INTERIOR TRIM. HARDWOOD FLOORING.

442 LAND TITLE BLDG.

PHILADELPHIA, PA.

WISTAR, UNDERHILL & NIXON

REAL ESTATE TRUST BUILDING, PHILADELPHIA, PA.

QUARTERED WHITE OAK

NICE FLAKY STUFF

WM. E. LITCHFIELD

MASON BUILDING, BOSTON, MASS.

Specialist in Hardwoods

Manufacturers are requested to supply lists of stock for sale

We Know How to fill your orders for all kinds of HARD-
WOODS, WHITE PINE, YELLOW PINE,
SPRUCE, HEMLOCK, CYPRESS, HARDWOOD FLOORING.

Give us a trial.

THOMAS E. COALE LUMBER COMPANY
FRANKLIN BANK BUILDING, PHILADELPHIA, PA.

JONES HARDWOOD COMPANY

WHOLESALE DEALERS IN

HARDWOODS—Poplar and Gum

33 Broad Street,

BOSTON, MASS.

IF YOU HAVEN'T SEEN THE GIBSON TALLY BOOK

Let us send you one on approval, with samples of Tally Tickets for triplicate, duplicate or single tallies—a score of forms to choose from. They are the latest and best. Endorsed by hundreds of lumber manufacturers and buyers.

HARDWOOD RECORD

CHICAGO

THE EAST

LEADING MANUFACTURERS AND JOBBERS

W. P. Craig Lumber Co.

Wholesale Hardwood and Building Lumber

Empire Building, :: PITTSBURG, PA.

Saw Mills Designed and Built

Plans and specifications prepared. Construction supervised. First class heavy millwright work. Entire plants surveyed. Machinery for complete mills. Fire loss adjustments. Practical sawmill engineer. Can save you money. Highest testimonials.

C. M. STEINMETZ,

P. O. Box 83, Washington, D. C.

CHARLES HOLYOKE

141 MILK STREET, BOSTON, MASS.
HARDWOODS

H. D. WIGGIN 89 STATE STREET
BOSTON, MASS.
MANUFACTURER HARDWOOD LUMBER
Circular-sawed Poplar, Oak, Chestnut, Basswood, Maple
Mill at Stone Coal Junction, West Virginia

89%

of HARDWOOD RECORD subscribers are owners of steam plants. Eighty-nine per cent are, therefore, buyers of wood-working machinery. There is little percentage of waste circulation in HARDWOOD RECORD for machinery advertisers.

HARD MAPLE

When the quality of being hard is required in Maple, Vermont or Adirondack stock should be specified. Maple will not grow harder for us than other people, but it certainly does grow harder in this section of the country than elsewhere.

WE CAN MAKE PROMPT SHIPMENTS.

GEO. WEBSTER LUMBER CO.

New York Office
25 West 42nd St.

21 Besse Place, Springfield, Mass.

ASH

4/4, 5/4, 6/4,
8/4, 10/4, 12/4
and 14/4.

MAPLE

4/4, 5/4, 6/4,
8/4, 10/4, 12/4
and 16/4.

YELLOW POPLAR

All grades and thicknesses.

AMERICAN
LUMBER & MFG. COMPANY
Manufacturers and Wholesalers
PITTSBURGH, PA.

HARDWOOD

White and Yellow Pine

We make a specialty of thick White Ash, Hard Maple and White Oak.

Railroad Car and Construction Oak timbers, long lengths and special sizes.

Write for prices before heavy call for Spring requirements.

POPLAR

4/4 Bay Poplar
(Tupelo 1st and 2nds.)

OAK

White and Red, Quartered and plain sawed, all grades and thicknesses.

CHESTNUT
All grades and thicknesses.

SPRUCE

All grades and thicknesses.

LET us talk to you about the plain and quartered oak that made Indiana famous. It's the kind we make to-day.

Wood-Mosaic Co., New Albany, Ind.

R.E. Wood Lumber Company

☞ Manufacturers of Yellow Poplar, Oak, Chestnut, Hemlock and White Pine.

☞ We own our own stumpage and operate our own mills.

☞ Correspondence solicited and inquiries promptly answered.

GENERAL OFFICES:
CONTINENTAL BUILDING.

Baltimore, Maryland

YOU pay a *little* more for our hardwood lumber than you do for many others, but it's worth *much* more.

With our modern and first-class equipment and expert operatives, we couldn't make bad lumber if we tried to, because the *quality* and *size* of our virgin tough mountain white ash, red birch, yellow poplar, buckeye, maple, red oak, cherry and basswood, averaging less than three logs to the thousand, and 95 per cent sixteen feet, is the best type of hardwood timber growth in the United States, and shows a larger percentage of *firsts*.

If you are a discriminating buyer let's get acquainted.

LITTLE RIVER LUMBER COMPANY,

Townsend, Tenn.

Dry Poplar

**for
Immediate
Shipment**

2 cars 4/4 Fas.
2 " 4/4 Saps, Selects.
3 " 4/4 No. 1 Common.
3 " 6/4 No. 2 Common.
1 " 8/4 Fas.
2 " 8/4 Saps, Selects.
5 " 8/4 No. 1 Common.
4 " 8/4 No. 2 Common.
2 " 10/4 No. 1 Common.

FAUST BROTHERS LUMBER COMPANY

Sales Office
1319 Fisher Bldg., CHICAGO

Main Office
PADUCAH, KENTUCKY

FREIGHT OVERCHARGES

WE SPECIALIZE ON LUMBER TRAFFIC

We represent nearly every member of The Mississippi Pine Association

Our overcharge claims for one company, \$6,000.00

Let us analyze your freight accounts
Collect past and prevent future overcharges
Best references from Lumbermen from
Canada to Mexico

COST BASED ON RESULTS

Write for particulars and terms.

The American Freight Audit & Storage Co.

Incorporated
Rooms 55-8, 39 West Adams St.

Chicago

**FIRE
INSURANCE**

Lumber Underwriters

66 BROADWAY
NEW YORK

M. F. PERRY, Manager.

Panel and No. 1 Poplar

5 cars 4/4" 18/23"

5 cars 4/4" 24" and up

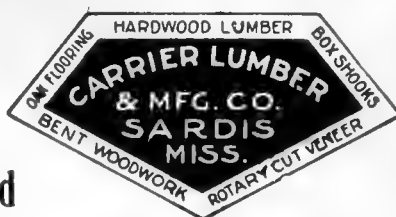
Let Us Have Your Inquiries

RUSSE & BURGESS, Inc.

Memphis, Tennessee

OAK FLOORING

**Kiln-
Dried
Polished**



**Hollow
Backed
and
Bundled**

89%

of **HARDWOOD RECORD** subscribers are owners of steam plants. Eighty-nine per cent are, therefore, buyers of wood-working machinery. There is little percentage of waste circulation in **HARDWOOD RECORD** for machinery advertisers.



Hardwood Record



Published in the Interest of the American Hardwood Forests, the Products thereof, and Logging, Saw Mill and Wood-working Machinery, on the 10th and 25th of each Month, by

THE HARDWOOD COMPANY

Henry H. Gibson, President
Burdie Anderson, Sec'y and Treas.

Entire Seventh Floor Ellsworth Building
537 So. Dearborn Street, CHICAGO

Vol. XXXV

CHICAGO, DECEMBER 25, 1912

No. 5



Review and Outlook



The greetings and felicitations of the Christmas season are extended by **HARDWOOD RECORD** to its friends, and the good will is accompanied by the wish that progress and increased prosperity will crown all efforts to enlarge business, extend influence, and increase fields of usefulness during the coming year.

General Market Conditions

In contrast with the usual course of lumber purchases at this time of the year, there seems to be a proportionately small falling off in trade on account of the approach of the inventory season. It is true that a good many buyers are holding off on purchases and further that a great many small orders are placed rather than a lesser number of larger orders. On the whole, however, the percentage of postponed business is small in comparison with other years. This condition is not true alone in any one place, but is reported from most of the large hardwood centers of the country.

Another gratifying feature is a report coming from the main shipping points to the effect that a continued improvement is noted in the car situation. It is, of course, not true that the car shortage is over or that marked trouble and delay due to inability to secure cars is a thing of the past. The chief difficulty is encountered in the smaller shipping points, but at all competitive points the report is that cars are coming in in fairly satisfactory numbers. This should mean that in the South the shortage of logs will be wiped out and that sawmills will soon have in their log yards plenty of timber to carry them through the winter. It is not to be anticipated, however, that the next few months will show any marked accumulation of hardwood lumber, as the vast volume of business that is booked will take care of any excess production for some time to come.

All of the consuming lines are showing continued activity in purchases. The building trade has maintained a healthy condition with the possible exception of certain large eastern cities. In this terri-

tory real estate interests, in an effort to prevent a slump in the real estate market, have exerted considerable pressure with the view of preventing excessive building operations. The wisdom of this policy will undoubtedly be felt in the future as an undue boom in building at the present time would surely lead to hardship in this line in the months to come. However, the situation in building in all sections is good.

Among hardwood consuming factories there is reported a slight disposition on the part of buyers to look doubtfully at advanced prices. Some buyers are hesitant about placing orders because of the fact that enhanced lumber values might necessitate their raising their own prices. If such a raise were not general, it would react to the detriment of those concerns putting advanced prices into effect.

The export business has not shown any marked change one way or the other during the last two weeks. Good conditions prevail abroad and there is a very considerable demand for American hardwoods. Concerns on the other side in many cases are meeting markedly advanced prices asked by sellers on account of increased freight rates. It is reported from some sources that rates are liable to advance further during the coming year.

About the same relative position is being maintained by the different woods in the nature of their acceptance by buyers and values asked.

One of the most notably strong items in the general hardwood field is ash in varying thicknesses, although thick ash is stronger than inch stock. Some little advance in price has been noted in ash lumber during the last week or ten days.

All items of oak are being called for. Plain red oak is as usual the leader, with plain white oak a close second. Continued improvement in demand and price for quartered oak is being maintained throughout the country. There seems to be no question but that quartered oak has "come back."

The situation of birch, beech and maple is in a continued healthy state. In the North basswood is also very active, No. 3 basswood being practically completely out of the market.

One important Indiana point reporting on hardwood market conditions makes the gratifying statement that 1912 showed ten per cent better in volume of business than 1911, although the first six

SUBSCRIPTION TERMS: In the United States and its possessions, and Canada, \$2.00 the year; in foreign countries, \$1.00 extra postage.

In conformity with the rules of the postoffice department, subscriptions are payable in advance and in default of written orders to the contrary, are continued at our option.

Instructions for renewal, discontinuance, or change of address, should be sent one week before the date they are to go into effect. Both old and new addresses must be given.

Both display and classified advertising rates furnished upon application.

Advertising copy must be received five days in advance of publication dates.

Telephones:—Harrison 8086-8087-8088.

Henry H. Gibson, Editor; Hu Maxwell and Edwin W. Meeker, Associate Editors.

Entered as second-class matter May 26, 1902, at the postoffice at Chicago, Ill., under act of March 3, 1879.

months of this year were behind the first six months of the previous year. December in this particular section was by far better than December, 1911.

With the buyers actually scouring the country for stocks which they want, and no prospect of production in excess of present orders and demand in the immediate future, there is everywhere the sincere belief that 1913 will show up to be one of the best years ever experienced in the hardwood business. This condition is not one of boom, but is one which is founded on strong fundamental conditions as governed by supply and demand.

The Car Situation

The car shortage has been more acutely felt in the cotton producing states probably than in any other section of the Union and its effect upon the lumber trade in that territory has been more serious than in any of the other lumber states. Word comes now, however, from Missouri, Arkansas and Mississippi points that the lumber movement is showing a gratifying improved condition and that while many mills in the Memphis territory have been running with but a few days supply of logs ahead, their transportation facilities in the nature of freight cars are in better condition than for several weeks. This does not by any means signify that car shortage is a thing of the past or that its back has been broken. It does, however, offer a ray of hope to the many shippers of lumber who have been caused no end of anxiety and trouble because of their inability to make delivery due to their lack of shipping facilities. The situation in other points of the country has shown some improvement for several weeks and if the Memphis roads at least hold their own in the matter of supplying cars to the lumber trade, the situation generally will be gratifying to lumbermen. It is to be hoped that all shippers will continue to do their utmost to help the transportation companies facilitate the movement of rolling stock.

Through Bills of Lading on Lumber May Result

As a precedent the recent ruling of the Interstate Commerce Commission compelling railroads operating in Texas to issue through bills of lading on cotton shipments for export trade going out of New Orleans should be of some value in the fight being carried on by lumber interests to secure such a ruling as applied to railroads west of the Mississippi. The weak point in the decision is the admission by the Commission that it has no authority over the steamship companies and can only compel the roads to issue such through bills of lading when they are acceptable to the steamship lines which will carry the goods. Nevertheless a number of the lines have signified their willingness to accept such bills and with the power of the Commission behind them, cotton shippers will have achieved a material victory in this controversy. That element of the hardwood trade interested in export shipments is thoroughly conversant with the serious effect upon the export trade which has resulted from the refusal of the railroads to issue such through bills of lading. They should feel somewhat encouraged by the Commission's decision in the cotton case and should feel that they at least have a precedent on which to work in pressing their own case before that body.

Rush Sawing versus Good Lumber

The continued lack of stock in the northern woods preventing the getting in of logs for the winter's cut and the shortage of cars in the South, equally effective in the matter of keeping down the supply of logs for the southern hardwood mills, make it increasingly apparent that when the mills actually have enough logs on hand to start operations, the rush of business in getting out accumulated orders will occupy the first attention of the mill owner. Alarming high values on stumpage throughout all the hardwood producing territories of the country have kept constantly before the millman's mind the question of how he can best turn this stumpage into the class of lumber which will produce the most value when turned into cash. His attention has been focused most closely upon the matter of sawing the right dimensions and thicknesses to meet the demand of the consuming market and second to this he has given his attention to the production of the absolute maximum in quality. Necessity of

demand will continue to force his attention to the first question and it is to be hoped that his vigilance will not be relaxed in the matter of producing the highest class of lumber which he can get out of his logs. Not considering the question of consumer's wants or the matter of satisfying a customer, the mere value of hardwood timber as it stands today should be a sufficient reason for the sawmill man's giving his closest attention to the matter of the highest grade and quality of production. Rush work involving overtime and double crews is never in accord with the best ideas of quality production in any line of manufacture. Under these conditions the most difficulty is experienced in maintaining the interest of the men and in effecting a close supervision of production. Nevertheless overtime work is a necessity under certain conditions and those conditions will undoubtedly exist this winter. Millmen can undoubtedly give good thought and close attention to provide beforehand for some means of mill operation which will result in the production of that class and those grades of lumber which will mean the fullest possible value from the sawlogs at hand.

Why We Need Accident Prevention

The bare statement that in one year there were 12,000 employees killed or injured in the state of Washington alone is in itself a sufficient argument to offset any doubt as to the entire necessity for radical provisions working toward the prevention of accidents in industrial plants. This condition does not apply strictly to Washington as undoubtedly if records were compiled from every other state in the Union they would be proportionately as appalling. It is gratifying to note the tone of discussions at the various meetings of lumbermen and others affiliated in different ways with wood producing and using industries on this question. In no case has there been any active opposition to the establishment of the rules and methods for prevention of accidents among employees. In fact, the whole controversy has narrowed down to the question of the most efficient and practical means of establishing safeguards which will actually safeguard. The chief difficulty has not been in finding suitable appliances to protect workmen from machinery or from injury in connection with dangerous employment, but is rather in the education of the workman to the absolute necessity for his observing instructions and utilizing such appliances and following such regulations as will reduce to a minimum his chances for injury while at work. In the sawmill, the veneer and panel plant, and woodworking factories and in the woods and logging camps many new devices have been introduced and methods of applying them and instructing workmen have been devised; but in every instance where an employer has reported on conditions he has expressed the same opinion,—that it is extremely difficult to provide a safety device or to put into effect a rule which is fool proof.

It would seem that the difficulty lies in the fact that the appeal has been made directly from the employer's office to the mechanic in the shop. It would seem further that if means were taken whereby the foreman, who is in close personal contact constantly with his men, were brought in close sympathy with the intentions of the employer and if the new ideas through him were transmitted to the workman, the effect would be more satisfactory. Such a scheme has been used in a number of plants, which schemes have embodied regular conferences between the employer and the heads of the various shop departments in which the foremen were given minute instructions as to education of the men and strict personal supervision looking toward their strict adherence to rules and constant utilization of safeguards. If such a method were in adoption generally, half of the difficulty of safeguarding employees would be eliminated and with it the expense contingent upon casualty insurance would be materially reduced.

Standardizing Hubs

Manufacturers of farm wagon wheel hubs have lately worked up the idea of standardizing hub manufacture with a view of reducing the confusion of variety and eliminating unnecessary machine changes. They are co-operating with wagon manufacturers and this working together will eventually result in doing away with a great many

useless sizes and patterns. The smaller number of standard sizes and patterns will be introduced. The inevitable result of this move will be a better class of work and greater efficiency and economy in manufacture. It will also mean improved service to customers as the ability to carry in stock any article of commerce greatly reduces the difficulty of sales and delivery. Besides saving a great deal of time in useless changing of machinery, it will also do away with the necessity for carrying extra equipment for lathes and mortises. The direct result of standardization in hub manufacture will be a reduction in the variety of spokes manufactured. The good effects as felt by spoke manufacturers will be equally noticeable as those felt by the manufacturers of hubs.

An Opportunity to Reduce Fire Risks

The approach of the annual shut-down season should bring to the mind of the lumberman ideas involving other efforts than merely to improve the various mechanical features of his plant such as repairing machinery, in shop construction, taking out old equipment and putting in new, etc. The strong campaign which a certain mutual fire insurance company carrying lumber risks exclusively has been carrying on with the view of educating the lumber trade to the necessity of improving conditions at the plants, should awaken the lumbermen and owners of other woodworking plants to the necessity for doing everything possible to safeguard their properties and hence materially reduce the cost of their fire insurance. A great deal has been written by this company involving many suggestions for producing this effect. One of the most important things pointed out has been the advisability of entirely whitewashing the interior of sawmills covering all points inaccessible while running, on which dust can accumulate. This whitewashing is a means of materially reducing the risk of fire, and is such a simple operation and so inexpensive that there is no excuse for any sawmill owner not to take advantage of it while his mill is not running. Numerous fires often result from sparks, matches, cigarette or cigar butts and other points of fire lighting on grease soaked wood. It would seem that it would be a pretty good policy of self-protection to thoroughly scour such surfaces and cover them with a coat of paint from which grease can be cleaned daily rather than allowing it to accumulate and soak into the wood. It would seem, too, that this is a good period for a general cleaning up, eliminating all dust from cracks, crevices and beams throughout the mill. It is these little accumulations of refuse that are often the breeding spots of what eventually are disastrous fires. It surely is to the interest of the sawmill man or owner of the woodworking factory to take advantage of this period to do everything possible that will result in lowering his insurance costs.

Trade in Forest Products Between the United States and Canada

Statistics on the export value of wood products from Canada to the United States covering the fiscal year ending March 31, 1912, show that the value of these exports is the smallest during the past five years with the exception of 1909. The total this year was \$30,065,206. The same can be said of the export value of manufactured wood specifically, the total in this case being \$25,444,986.

The exports of planks and boards during the fiscal year ending

March, 1912, aggregated in value \$13,634,108. This represented the total shipment of 776,992,000 feet. The total during the preceding fiscal year was 847,948,000 feet, valued at \$15,948,791. In this line of export also the fiscal year ending last March shows the smallest total of any year in the last five. The value of pulp-wood export during the same period was less than either of the two preceding years, aggregating \$5,697,901, representing a total of 879,775 cords.

On the other hand, the import value of sawed boards, planks, etc., subject to duty entering Canada from the United States has increased rapidly during the last few years, the total during the fiscal year ending March 31, 1912, amounting to 52,538,000 feet, with a value of \$687,659. The imports of oak lumber during the period amounted to 62,250,000 feet, with a value of \$2,411,766. This is a greater import value than any of the four preceding years.

What Is Christmas Without a Tree?

A Canadian lumber journal of merit, in commenting upon the cutting of young evergreen trees for purposes of decoration and sentiment in connection with the Christmas season, says that it has called attention to this matter regularly at Christmas time each year and that it hopes that the authorities will do something to stop the attendant waste which results from the celebration of an event

which can just as well be celebrated in some other manner or with trees equally effective if made of some artificial material. The fact that an enormous number of young trees are cut each year for Christmas tree purposes is pretty general knowledge, as is also the fact that in cutting these trees, there is an enormous unnecessary waste attendant through poor judgment in cutting and poor packing. It is very doubtful, however, if any but a very small percentage of even such practical men as lumberman will feel any sympathy for a plea having as its object the elimination of one of the most pleasing customs of civilized people. One needs but to think of the extreme joy which the sight of a beautifully trimmed Christmas tree creates in the heart of the small child and then compute the number of such children and the aggregate of such joy to be fully convinced that the

elimination of this so-called waste will cause a waste of far more importance,—that is, it would be one step toward the destruction of a sentiment which is one of the strongest and most securely cemented stones in the foundation of our civilization. The elimination of the Christmas tree custom would undoubtedly destroy half of the sentiment attached to Christmas. This would certainly not work to the ultimate advancement of our people.

What we want rather is an intelligent regulation governing the cutting of Christmas trees and their shipment and marketing. There is no reason why ultimately special plantations could not be set aside for the growth of Christmas trees, creating a perpetual supply of these trees and doing away entirely with the destruction of natural growth which would eventually be of suitable size for sawlogs and pulp-wood. The trend of modern conservation would certainly indicate that such a plan is not at all impractical. The question has been discussed at different times by interested authorities and it is not at all improbable that not many years hence we will see this scheme in actual operation.

While it is true that this custom is not general in Canada and that the editorial referred to is opposing the cutting of Canadian trees,

UNSOLICITED TESTIMONIAL

Clyde Iron Works

Manufacturers of

Steam Log Loaders, Steam Skidders, Logging Tools, Hoisting Engines, Derricks, Excavating Machinery

Duluth, Minn., Dec. 13, 1912.

HARDWOOD RECORD,
Chicago, Ill.

Gentlemen:—I am returning herewith the slip authorizing you to continue our advertising for 1913 on the same basis as for this year.

I will take this opportunity to remark that my records for the past six months prove your paper to have been among the most valuable of our advertising mediums. We sincerely hope that such will continue to be the case during 1913 and that the good results you secure for your advertisers will add immensely to your own prosperity during the coming year.

Yours very sincerely,

CLYDE IRON WORKS,
Chas. Mackintosh, Adv. Mgr.

it is also true that the opposition to the Christmas tree tradition is seen generally among the stern old Scotch element, and that the custom is being experimented with by the younger generation. Our Canadian neighbors should try it and see how much fun it is. There is no question but that, if they would bend their cold dignity to that extent, they would reap a rich reward in the added pleasure lent to the Christmas season and would amend their views on conservation in this particular. It is to be deplored that the mere thought of monetary aggrandisement would take precedence over the celebration of a custom which has given so many of us so much pleasure.

Canadian Shippers Also Suffer

That the many aggravating questions which constantly face the shippers in this country and which command so much of their time, thought and capital are not confined alone to our American industries is instanced in a protest emanating from Canadian lumber territory against a decision of the Dominion Board of Railway Commissioners handed down recently. This board is a body similar to our Interstate Commerce Commission and works very much on the same basis. The question in dispute is one involving an increase in demurrage rates, the commissioners having granted permission to the railway companies to increase demurrage charges. While railways are not permitted to put into effect the total increase which they asked, they were granted the privilege of doubling the charge on the first demurrage day and allowing a charge of \$3.00 for each succeeding twenty-four hours. A Canadian contemporary, speaking editorially on this decision, says that the speed with which the commissioners handed down the decision in the interests of the railroads as contrasted with the length of time it usually requires to arrive at a decision in the interest of the shippers, argues that the commissioners did not give due consideration to the shippers' interest.

This point merely illustrates the fact that the controversy between different factors in the commercial world engaged on the basis of trading service or commodity for coin of the realm is a perpetual one and one of universal extent. The time will probably never come when there is not some question up for dispute between these different factors. The question should not be one looking toward the elimination of such dispute,—which is impossible,—but rather toward a sure and quick means of amicably settling them.

Where the Panel Man Is Weak

Probably in no other item entering into panel construction is there such a variety of opinion and lack of authentic and uniform information as in glue. Consumers of glue using it for gluing up purposes in panel work have long resorted to "rule of thumb" methods of determining the adaptability of certain grades of glue for their work. In view of the extreme importance of uniformity in glue used and of constantly employing a high class quality, it would seem that in the interests of their reputations manufacturers of panels would exercise every precaution to secure a uniform quality in their glue purchases. That this is, however, not generally done is conceded by anyone conversant with conditions.

Various practical methods have been employed for testing glue but there seems no reason why scientific methods which in themselves are extremely simple should not be used generally by panel manufacturers. In treating of this subject an authority, speaking before the recent meeting of veneer and panel manufacturers, explained the simplicity of scientific treatment of the glue question.

He advocated instead of the old so-called practical methods of glue testing, many of which are really no test at all, that manufacturers make their tests based on two principles—namely, the viscosity and the jelly strength of the glue. As most people know, viscosity means the rate of flow, and it is gauged by timing the rapidity of flow of a glue solution through a small hole in the bottom of a receptacle containing it. The number of seconds required for a certain amount of glue to pass through this opening at a certain temperature constitutes its viscosity. By the jelly strength is meant the amount of compression required under certain conditions to force a steam plunger into the mass of glue. This is measured in pounds.

It has been demonstrated that the best grade of commercial glue

has a viscosity of 34.5 seconds, and a jelly strength of 48 pounds, while the poorest grade has a viscosity of 6 seconds and a jelly strength of 7.2 pounds, which points to the condition on which the whole question hinges,—namely, the extreme variability of glue quality. It has been demonstrated that no two concerns or any one concern at all times will produce the same grades of glue. In some instances shipments from the same concern supposedly of the same grade have been known to vary forty per cent in viscosity. This would surely argue that some means should be constantly employed for regular testing of all glue shipments. Inasmuch as the panel manufacturer's reputation stands behind his product and as glue is one of the most important of raw materials entering into the product, he cannot be too particular about his grade of glue.

Lumber Exports from Baltimore 1911 and 1912

A study of the custom house records on export shipments from Baltimore furnishes an indication of the general trend of the export trade and will therefore prove of interest. Comparisons of the current year with 1911 are impossible except in so far as totals are concerned, for the reason that the method of classification was changed last July a year ago. Previous to that time all exports of logs were entered in one column, but since then they have been separated, the chief classifications being hickory, oak, walnut and "all others." A similar rearrangement with respect to lumber has taken place, the returns being divided into short leaf pine, pitch pine, spruce, gum, oak, poplar and "all others." It is only by adding up the various classifications and comparing them with the totals for last year that the loss or gain can be shown. These totals almost invariably represent a large increase for 1912 over 1911. The only item in which there is a considerable decrease is timber, the value of the exports for 1912, with December estimated, being \$128,640 against \$174,625 for 1911. In boards, deals and planks, with December, 1912, estimated, there was an advance from \$1,288,133 to \$1,603,679; in staves one of from \$33,886 to \$63,250; in doors one from \$28,812 to \$40,632; in furniture one from \$28,325 to \$30,509; in moldings and trimmings a decrease from \$6,015 to \$5,120, and in all other items an increase from \$242,763 to \$360,938. The exports of this year, therefore, be it observed, are of far greater value than were those of 1911. A comparison of quantities is difficult with respect to logs for the reason that under the old classification cubic feet were counted, while at the present time the measurement is board measure. The number of feet of boards shipped this year is much larger than the total for 1911, the figures being 49,005,000 feet for 1912, against 33,606,000 in 1911.

Taking the figures for the current year, it is seen that the following stocks went forward, December estimated: Hickory, 1,041,000 feet, valued at \$28,246; oak logs, 1,649,000 feet, worth \$119,150; all other kinds of logs, 534,000 feet, worth \$18,945. Of boards there were exported through this port 39,000 feet of cypress, worth \$1,874; 31,620,000 feet of oak, worth \$1,088,269; 422,000 feet of white pine, worth \$34,306; 2,468,000 feet of poplar worth \$85,129; and 3,061,000 feet of other woods besides pitch pine, spruce and similar soft woods, worth \$133,264. Of staves a total of 987,629, worth \$63,250, went out, while 15,329 headings worth \$72,807 were exported.

An analysis of the figures for 1912 also shows that there was a decided falling off in shipments during the last six months or at least during the latter part of the summer, as compared with the first half of the year, the shipments of hickory up to July 1 having been 771,000 feet as against 270,000 feet for the last six months. The shipments of oak logs ran ahead, but of walnut 1,021,000 feet was exported in the first six months against only 628,000 feet in the latter half of the year. The decrease in all other classifications was from 325,000 feet to 209,000 feet. In the shipment of oak planks there was a sharp gain from 13,098,000 feet to 18,522,000 feet, while poplar and all other woods also increased. This shows the effect of the stevedores' strike and the subsequent rush to send stocks abroad.

Taken altogether, the year has been a very satisfactory one, both in point of quantity and of value, and the indications for 1913 are most encouraging, for the movement continues to be large, while prices are higher than ever.



Pert, Pertinent and Impertinent



How Differently It Looks Now!

While sitting idly dreaming in my office chair to-day,
My thoughts are roving backward in a retrospective way,
And I ponder over changes that the present year has wrought,
And wonder if we lumbermen are pleased with what it brought.
When 1912 came rushing in, the Presidential year,
We felt 'twas wise to travel slow, a panic might be near,
We trembled, sad and affrighted at each unusual sound,
When shipping culls were in the piles and mill culls on the ground.
We sold stock under contract and chuckled at each sale,
Delighted when fat orders came shipping in by mail.

The great accumulation of low grade stock would go
And in its place we'd substitute a sized bunch of dough
So cars were spotted on the tracks and loaded to the brim,
And every man without a job we quickly took to him.
The wheels of industry began to move around and round
When the shipping culls were in the piles and mill culls on the ground.

But soon our order books were filled and stocks were getting low,
The higher that the prices were the faster it would go
Until in desperation and with no relief in sight
We made a rule to add a dollar to each price each night.

But still the orders flooded us, our yard was getting bare,
The Yard Man soon reported "No low grade any where."

We mourn about low contracts by which we're tightly bound,
For no shipping culls are in the piles or mill culls on the ground.

Our wives say we have nightmares on each succeeding night,
Our mutterings and grumblings would give Old Nick a fright

We growl (and maybe something worse) about the stock we've sold

Too early at low prices, we weep to see the gold
That might have filled our coffers with that good old clinking sound

If our shipping culls were still in pile and mill culls on the ground.

A. S. B.

THE TRUE CHRISTMAS SPIRIT—NOT



Once upon a time the producer looked like the above gentleman with the whiskers, and the buyer took all that was coming. Santa has realized, however, that he can't keep the "Missus" and reindeer fat and warm without a little profit on his goods—now the buyer's mouth curves the other way.

A Fair Exchange

"Father, won't you buy me a watch for Christmas?"

"What do you want a watch for, my boy?"

"I want to swap it with Billy Wiggins for one of his pups."

Barred from Lumber Associations

"I hear Jones is in the lumber business."

"Yes, on rather a small scale."

"How's that?"

"He's peddling toothpicks."

A Gallant Answer

"You seem to be an able-bodied man. You ought to be strong enough to work."

"I know, mum. And you seem to be beautiful

enough to go on the stage, but evidently you prefer the simple life."

After that speech he got a square meal and no reference to the wood pile. *The Middle.*

Spoiled Her Secret

"My first husband and I kept our marriage a secret for nearly a year."

"Didn't you find it rather difficult?"

"Oh, no, not at all. We could have gone on for a much longer time if the horrible reporters hadn't been snooping around when I applied for my divorce."

Plenty of Them

Lawyer—"You claim to be a college graduate. Can you prove you have been given any degree?"

Prisoner—"Yes, sir; the third degree." *Baltimore American.*

Followed Host's Advice

"Mr. Pigg is altogether too literal."

"How so?"

"The last time he was at my house I told him to make himself thoroughly at home, and in less than five minutes he had quarreled with my wife, kicked the cat out of doors, discharged the cook, spanked the baby and told me I was a fool." *Til Bits.*

When a man takes his wife to the theater he thinks it's up to him to go out between the acts and telephone home to see if the house is still there.



American Forest Trees



ONE HUNDRED-SECOND PAPER

OREGON MAPLE

(*Acer Macrophyllum* -Pursh)

Botanists prefer to call this tree broadleaf maple. The name is not inappropriate, as its extraordinarily broad leaves constitute the most striking feature of the tree where it stands in the woods. The leaf is usually wider than it is long. Some exceed a foot in both measurements. Bigleaf maple is not an uncommon name for the tree in Oregon, where it attains its highest development in damp valleys where the soil is good. The name white maple is not particularly descriptive of any feature of the tree, though the name is applied in both Oregon and Washington. In California it is known simply as maple. There is small likelihood in that region that it will be confused with any other member of the maple household; nor is there much danger of such a thing in any part of the Pacific coast, for, though four species of maple occur there, no one of them bears close enough resemblance to this one to be mistaken for it.

The Oregon maple's range north and south covers twenty degrees of latitude. In that particular it is not much surpassed, if surpassed at all, by any maple of this country. Its northern limit lies in Alaska, its southern close to the Mexican boundary, in San Diego county, California. Its range east and west is restricted. It has a width of about one hundred and fifty miles in California, where it grows from the coast to the foothills of the Sierra Nevada mountains. An altitude of 5,600 feet appears to be the limit of its range upward. It attains altitudes above 5,000 feet at several points in the Sierra Nevada range. It descends nearly to sea level. Its geographical range is similar to the ranges of several other Pacific coast species which occupy long ribbons of territory stretching north and south parallel with the coast of the Pacific ocean.

This maple's leaves change to a clear reddish yellow before falling. Flowers appear after the leaves are grown, and the seeds ripen late in autumn. Some of them hang until late in winter, but the habit varies in different parts of the range, as is natural in view of its great extension north and south. The trees which stand in open ground are very abundant seeders, but those in dense stands produce sparingly, in that particular following the habit of most trees. This maple often grows in dense, nearly pure stands in Oregon and Washington where soil and conditions are favorable.

The sizes and forms of Oregon maple vary greatly. John Muir spoke of forests whose trees were eighty to one hundred feet high, so dense with leaves and so abundantly supplied with branches that moss and ferns formed a canopy with foliage and limbs high over

head, like an aerial garden; while George B. Sudworth described it in certain situations as a short-stemmed, crooked tree from twenty-five to thirty feet high and under a foot in diameter. The forms are the extremes, and there are all sizes and kinds ranging between.

This maple has been called the most valuable hardwood of the

Pacific coast, but that claim is made also for others. Some persons rate it with the hard maple of the East, in properties which commend it for use. It is doubtful if the claim can be substantiated. According to Sargent's figures for strength, stiffness, weight, and full value, it lacks much of equalling the eastern tree. It is twelve pounds per cubic foot lighter; has not three-fourths the fuel value; and is little more than half as strong or as stiff. The comparison is more in favor of the western tree when color of wood and appearance of grain are considered. The wood is light brown with pale tint of red. The rings of annual growth are tolerably distinct, with a thin, dash line separating the summerwood of one year from the springwood of the next. The pores are scattered with fair evenness in all parts of the ring. They are small and numerous. The medullary rays are thin and abundant. In quarter-sawed wood they show much the same as in hard maple, but are rather darker in color. The mirrors are decidedly tinged with brown. The wood is reported poor in resisting decay when in contact with the soil; and in that respect it is like the other.

The largest use of Oregon maple appears to be for furniture, second, for interior finish, and following these are numerous miscellaneous uses. Statistics of the cut of this wood, as shown by sawmill reports, are unsatisfactory. Census returns include it with all other maples of the country, without figures for species. The cut of maple for all the western states seems too small to give this wood justice. The amount reported used in Washington, Oregon, and California exceeds

the total reported sawmill cut in the West.

The wood of the Oregon maple is an important handlewood. The smooth grain appeals to broom makers. The wood is made into axe handles, but for that use it is much below hickory, or even hard maple or white oak. It is converted into pulleys in Washington, also into saddle trees, and tent toggles. Boat makers employ it for finish material, in which capacity it fills the same place, and must meet the same requirements, as in interior finish for houses. Curly or wavy wood is occasionally found and this is worked into



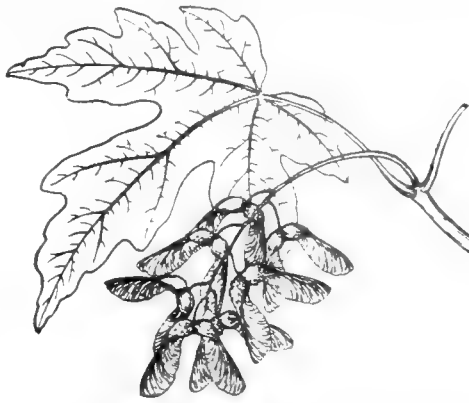
FOREST GROWTH OREGON MAPLE, PIERCE COUNTY, WASHINGTON

finish and also into furniture. The figure is as handsome as in eastern maple, but bird's eye is less frequent. Counter tops for stores and bar tops for saloons are sometimes made of figured maple. It is seen also in grill work and show cases, but in order to show the figured wood to the best advantage it should be worked in flat surfaces.

Oregon maple is converted into flooring of the ordinary tongued and grooved kind, and also into parquet flooring. Rotary veneers are made into boxes and baskets. Solid logs are turned for rollers of various sizes and kinds. Mill yards use them for offbearing lumber, and house movers find them about the best local material to be had.

This maple has been successfully stained in imitation of mahogany, and is said to pass satisfactory tests where the color is the principal consideration.

The amount of this species available in the Northwest is not defi-



LEAF AND FRUIT OF OREGON MAPLE

nately known, but it is a relatively scarce wood. No attention has ever been given to planting it as a commercial proposition. It is not of very rapid growth, and unless it is in dense stands, it develops a short trunk and large crown. It is better suited for shade and ornament, and is to be seen as a street tree in some western towns. It does not flourish in the eastern states, but has found the climate of western Europe more congenial and is occasionally found as an ornamental tree there.

The relative importance of this maple in the state of Washington is indicated by the amount used annually compared with certain other hardwoods. In 1911 the consumption of willow was 2,000 feet, vine maple 10,000,

Oregon ash 58,000, Oregon oak 197,000, western birch 315,000, Oregon maple 932,500, red alder 1,881,500, and black cottonwood 32,572,200.

Lumbermen's Interest in Toys

The lumberman should not "despise the day of small things." Toys may seem trivial to a man who deals in forests, mills and factories; but there is reason why he should take an interest in things made for the amusement of the little people. The matter is important to him in a business way. The toy maker buys lumber and puts wood to use. The quantity demanded in this country is not as small as many suppose, though, of course, the quantity cannot be compared with what is used by box makers, furniture manufacturers and the makers of vehicles. Complete statistics of the toy business in this country have not been compiled. Toys are of various materials—metal, plaster, rubber, wood, etc.—but in the present instance those of wood alone need consideration.

Statistics have been collected in three states showing the quantity and kinds of wood made into toys. These figures give a fairly good idea of the business for the whole country. However, the three states are in the North, and it is not probable that southern states use as much wood for toys, because the country's toy business is principally in the North. The three states are Massachusetts, Michigan and Illinois. Thirteen different woods go to toy factories in Illinois, and the quantity is 673,000 feet a year; eleven woods are used in Massachusetts, to the amount of 933,500 feet annually; and in Michigan the quantity per year is 3,714,692 feet; it is supplied by twelve woods.

The wooden toys displayed in shops, particularly while the holiday trade is on, are not all made in this country. In fact, most wooden toys offered for sale here are made in Germany and Switzerland. That applies particularly to toys which are not intended to be useful, the primary idea being to amuse the child. Those which belong in that class and are principally of foreign make imitate animals, houses, building blocks, circuses, Noah's ark, and various other things meant for indoor amusement. Most American made toys are in a different class, and it is in these that the lumberman feels a business interest because he supplies the material for their manufacture.

The prevailing idea governing their construction is that they shall be useful as well as amusing; at any rate, they belong more with out-of-doors sports than in the house. They consist of toy sleds large enough to ride and haul things on, and wagons of like dimensions; swings and slides; tools with which a little work can be done by the child, such as spades, rakes, hoes and brooms; tent poles, stakes and toggles for erecting wigwams, and numerous other things of similar size and kind. American toy makers excel foreigners in producing useful toys, and pay less attention to things flimsy and grotesque. Americans generally use better wood. The German and Swiss toy makers have choice of comparatively few woods. Europe is exceed-

ingly poor in kinds compared with America. The shop which makes toys on the other side of the water depends largely on what they call "fir." Some of it is fir, but more is spruce and pine. A little hardwood, commonly birch or some species or variety of cottonwood, is mixed with it. The manufacturers buy the cheapest woods that can be made to answer their purpose, in order to keep the price of the finished toy down, and still get something for their labor. They use the refuse and scraps from shops where furniture and other commodities of considerable size are made, and they are able to utilize pieces so small that an American match factory or shoe peg mill would reject them. As is well known, a large part of the wood used in western Europe is produced by planted forests, and, though it is usually poor stuff, it costs more than good woods in this country.

Americans can afford to use better woods and they are not stingy with it. They put good material into their product. Sleds, for example, will stand all kinds of strains and collisions, and wagons will stand up under long service and surprising abuse. In Michigan the only softwood reported by toy makers was Norway pine, which constituted less than four per cent of the total quantity used. Beech was forty-five per cent, and the strength of the sleds made in that state is due to the beech employed in their construction. It is a strong wood; and though it is apt to snap square off if it breaks at all, it is so stiff that it seldom breaks. Elm is used in Michigan toys to the amount of 900,000 feet, and that is fine material for commodities which are expected to stand rough usage. Elm is tougher than beech, but not as strong. The other woods reported by Michigan toy factories are, basswood, sugar maple, bur oak, white oak, sweet birch, white ash and soft maple.

Woods used in Illinois by the makers of toys, in addition to most of those reported in Michigan, were black walnut, Spanish cedar, butternut, red gum, cottonwood and shortleaf pine. In Massachusetts nine hardwoods and two softwoods were reported. The softwoods were hemlock and white pine, and the hardwoods chestnut, red oak, white oak, black cherry, hard or sugar maple, paper birch, basswood, yellow poplar and beech. Those used in largest amounts were beech and birch.

Foreign trade of this country for 1912 will exceed all records. Figures just compiled at Washington show that imports will approximate \$1,800,000,000 against \$1,563,000,000 in 1910. Exports will aggregate \$2,400,000,000 against \$2,093,000,000 in 1911, the previous high mark. The increase in import occurs especially in manufacturers' raw materials.



VENEER AND PANEL MEN IN SESSION AT ANNUAL MEETING CHICAGO, DEC. 10-11, 1912



Veneer and Panel Men Meet



Members of the National Veneer and Panel Manufacturers' Association held their eighth annual meeting at the Auditorium hotel in Chicago on December 10 and 11. An unusual attendance marked the meeting. Besides the gratifying attendance, another feature of particular interest was the unusual character of the papers presented and the interest with which the members entered into various discussions. On the whole the meeting can be voted one of the most profitable which was ever held by this association.

President C. T. Jarrell opened the meeting with an address in which he outlined the development in the veneer industry during the past five or six years. He spoke of conditions as prevailing immediately after the panic of 1907, when the mill capacity was very much in excess of the legitimate consumption. This resulted in a continuous fight for business regardless of values, which condition prevailed for several years, although there has been a natural and steady increase in demand during that time. In speaking of present conditions and the unusual demand, President Jarrell said that, while there is ample market to take care of all the production of the members, still there is also ample manufacturing capacity to meet all possible calls for stock made by the veneer and panel companies. The excess of immediate demand over supply was attributed by the speaker to unusual circumstances. In the South the last winter proved to be the most unfavorable for getting out rough stock that has ever been experienced by the mills in that territory. Northern mills have in many cases been closed down during the fall because of shortage in timber supply, and will be unable to start up again until this can be replenished after the winter sets in.

President Jarrell sounded a note of warning against overproduction, recalling the dire results on account of increase in capacity in 1907. He stated that veneer and panel manufacturers are now in position to realize a profit from their manufactures and that each should resolve to do his utmost to prevent a repetition of the errors of that time.

Co-operation, according to the speaker, is one of the essentials which the veneer and panel business has lacked to a marked extent since its inception. "In the past," the speaker said, "the veneer and panel manufacturers have been entirely too exclusive in their demeanor, too cold and distant, and too many of them have been for

themselves alone, overlooking the fact that when they are trying to help someone else by free discussion of their methods, they are also helping themselves." The greatest possible good from association work can come from this very point through co-operation. Conditions are ripe at present for complete co-operation and new plans for stronger and more effective co-operation have been made and put in effect. By reason of these plans, more manufacturers are today interested in the association work than ever before.

Touching on prices, the speaker said that they are not what they should be and that he feared the item of cost is not claiming sufficient attention. He suggested that every mill should employ an adequate cost system and every manufacturer be able to tell exactly what his goods cost.

The president deplored the condition of the various states in the matter of industrial liability. He stated that in many instances there is practically no defence in case of accident and that consequently the rates of liability insurance companies have been advanced several hundred per cent. In addition to this factor, the increase in transportation cost and the cost of logs and stumpage and labor must be taken into consideration in figuring value of products.

Secretary E. H. Defebaugh delivered a strong talk to the members in which he touched on various vital questions. The theme of his address, however, was, as with President Jarrell, co-operation. Through co-operation veneer manufacturers will be able to buy logs on a more just basis of cost and will be able to work out many questions vitally affecting individual membership. The speaker brought out the point that in figuring prices, costs of various items entering into production as existing a year ago cannot be used. Log values have advanced so materially, cost of labor has changed so remarkably, and other items have taken on such a different aspect that an entirely new status of conditions prevails. He suggested that overhead charges are usually figured much too low and that contingent expenses, such as are encountered for instance when mills are shut down, are seldom considered concretely in arriving at cost of production. He strongly urged members to consider that the philanthropists in business are in business for the sake of the buyer only and not for the sake of working out a living profit for themselves and their families.

The report of the treasurer showed balance on hand June 11, 1912, \$49.51; receipts during the year amounted to \$593.75; disbursements, \$366.32; cash balance on hand is \$276.94; to this can be added accounts receivable amounting to \$532. The report was referred to the auditing committee which later reported favorably upon it.

C. E. Gorham of the Goshen Veneer Company, Goshen, Ind., delivered a strikingly vital paper on factory safeguards against accidents. Summarized, the paper was as follows:

In every factory there are some machines on which the element of danger of operating is greater than on others and the nature of the work will not permit of guarding so as to absolutely prevent accidents where the work is carelessly handled. The best safeguard in such cases is to see that careful and competent men are employed to operate these machines and to prohibit any but the regular men to work on them.

The manner of handling logs in the yard and in and out of the vats varies to quite an extent in different institutions. I think that better results are obtained by my company and the chances of accidents less by placing the entire log in the vat with derrick, and after boiling or steaming, removing in the same manner to the drag saw to be cut into proper lengths, rather than to drag saw first and then place the blocks in vats as we used to do.

I also wish to call your attention to the manner of placing blocks in the lathe. There are several ways of doing this work and the most dangerous one, seems to me, is the hand derrick or windlass, such as is most commonly used for this work. My experience with the air hoists have been very satisfactory and we have never had an accident in this particular work since air hoists were installed in our factory. Several accidents occurred, however, during the time we were using the hand derricks or windlass which might have resulted more seriously than they did. We were simply lucky. I am not in a position to comment upon chain hoists which are utilized for this work, having never used them.

All belts which run from line shafts or counters to the floor or to machines where it is necessary to pass them, should be protected with wood or wire netting in a substantial manner. All clippers should have a guard in front and I should strongly recommend that you issue a strict order that two operators work at all times when these machines are in use, one to place the material under the knife and one to remove the clipped edges and stock. The habit of one man trying to do both jobs even for a short time may result in a loss of fingers.

The practice of clipper operators cutting scrap veneer into small pieces instead of immediately getting rid of it as soon as it becomes waste or scrap is one that should be absolutely prohibited. With us more accidents can be charged to this useless and unnecessary operation than from any other one cause, and it interferes with getting legitimate work through the machines.

Hand planers should be fitted with safety cylinders and guards. Shapers should also have proper guards, emery wheels fitted with safety collars and goggles or eye protectors provided, for use when hard grinding is being done.

When electric wiring for power and light is installed in accordance with the rules and requirements of the National Board of Fire Underwriters, there is but little danger from contact except at switches and fuse blocks. Knife switches and fuse blocks should always be placed in cabinets with doors. A copy of the rules for resuscitation from electric shocks should be posted so that prompt action can be taken in case of emergency.

Another matter I think worthy of mention and one that has been of great assistance to me in safeguarding our plant: I have made it a rule to personally accompany inspectors for the state and liability insurance companies through our factory rather than to turn them over to our superintendent or our foremen, and have always profited by so doing.

Mr. Gorham was called upon to answer many questions propounded by interested members. One man stated that ninety per cent of the accidents of his plant came from clippers and saws and asked for suggestions for some practical guards for these machines. Mr. Gorham suggested the difficulty of providing an efficient guard but said that in some instances a bar of iron is employed in front of the knife, allowing just room enough for the stock to pass through. Many guards, according to the speaker, curtail the production and are actually of very low efficiency. It was brought out in the discussion that the chief difficulty in efforts to safeguard workmen is in the attitude of the workmen themselves toward safeguarding devices. They usually disregard them entirely where any inconvenience is encountered in working with them. Proper safeguarding of the boiling vats seemed to interest most of the members present particularly. All agreed that one of the essentials to accident prevention at the boiling vats is to absolutely prohibit anybody working around them who is not directly connected with that work. One member employs an iron railing completely surrounding the vat, which is high enough above the ground to roll logs under. Men are

absolutely prohibited from going inside of this rail. At the log outtake there is a similar railed passage and the men are further provided with poles so that there is no danger of falling into the tank if the regulations are adhered to. One member who is from Kentucky reported that he got just as good results from steam as from boiling water. He reported that cost is about the same. Others, however, said that while steam is efficient in summer, it is absolutely worthless in winter and that exceptionally poor results were gotten from exhaust steam.

J. W. Deiger, glue expert of Mishawaka, Ind., read an exceptionally valuable paper on glue and its proper use and application in the panel and woodworking industries. The paper is reproduced in full elsewhere in this issue. Discussion following the paper, however, proved pretty conclusively that the average panel man's idea of the proper handling of his glue room to get out the most satisfactory results at the lowest possible cost is rather crude.

Henry Walscheid of the Veneer Manufacturers' Company of Chicago, a prominent veneer jobbing house, read a paper showing the jobber's view of the relation between the jobber and manufacturer. Mr. Walscheid's paper, which is published in full on another page of this issue, proved pretty conclusively the value of the legitimate jobber as distinguished from the commission man to the manufacturer. The sentiment which was brought out in the discussions following Mr. Walscheid's paper was notably favorable to the jobbing trade, considered as jobbers and not as commission men. One member differed with Mr. Walscheid in his assertion that the jobber could often find a market for cut-downs, the speaker contending that such stock is not marketable as it is in such a variety of sizes that handling of it would not be profitable. Mr. Walscheid contended, however, that if the manufacturer would state sizes which he can furnish in this class of material, it could be successfully handled through a jobber as this line of stock is usually bought on long-time orders and there is plenty of time in which to accumulate a sufficient quantity of it.

One of the most profitable features of the meeting was a series of talks on the log situation as it prevails in various parts of the country. Members from different sections were detailed to give their ideas on the condition in their territories. N. M. Willson of the Pearl City Veneer Company, Jamestown, N. Y., in telling of the situation in his territory outlined specifications for logs which he buys, saying that they take up nothing under fourteen inches and that they run usually from fourteen to sixteen inches. Maple is the principal wood bought by Mr. Willson. He gave an interesting comparison of log values prevailing fifteen years ago and now, stating that maple logs which were delivered at that time for twelve to fourteen dollars, now cost from eighteen to twenty-six dollars in extreme cases. Basswood logs then delivered for twelve dollars now cost from thirty to thirty-six dollars and can be had in small lots only. Eight years ago, according to the speaker, all the logs that were required could be drawn in in the winter on sleds from the surrounding country. Now three-fourths of the stock has to be shipped in by rail, some of it on as high as a five-cent freight rate, and the condition is getting more difficult from year to year.

The situation in the North, principally Michigan, as outlined by A. E. Gorham of the Gorham Brothers Company, Mt. Pleasant, Mich., is about the same as in New York state. Maple conditions are approximately the same, although basswood is not as expensive. Oak veneer logs now cost from thirty to thirty-eight dollars delivered. The situation, particularly in maple, is serious with northern manufacturers of veneer. This condition is traceable mostly to the fact that manufacturers of hardwood lumber throughout the state are fully alive to the condition regarding hardwood stumpage and are buying up every important hardwood tract which they can get hold of. This necessarily means that the veneer man who cannot afford to tie up his money in stumpage is up against it for log supply. Mr. Gorham predicted that oak logs will be from four to ten dollars higher during the coming year than they are now and particularly urged that veneer and panel manufacturers fully consider the unusual conditions prevailing in connection with stumpage in marketing their finished product.

R. C. Dayton, in telling of the situation in the Northwest, including principally Wisconsin points, said that the price situation there is serious and that there will probably be a general advance of twenty-five per cent during the coming year. Sawmills of recent years have not been heavily in the market for logs on account of trade conditions but this year the demand has been abnormal and there is great competition for birch, ash, maple and basswood.

W. F. Morris of the Paducah Box and Basket Company, said that gum logs are now bringing from two to three dollars more than last year. Where gum stumpage exists it is being bought up in any quantity by the hardwood mills. This condition is responsible for the fact that gum stumpage, which five years ago could be bought for four to five dollars an acre, is now bringing from fifteen to sixteen dollars.

President Jarrell stated that he now finds it necessary to get considerable of his timber from as far south as Mississippi and that there is great competition. He said further that the new regulations governing milling in transit are serious obstacles in shipping logs and that advanced freight rates is another factor contributing to the veneer man's troubles. One member, speaking of conditions in the West, said that poplar stumpage for veneering purposes which not many years ago cost eighteen dollars, now costs twenty-four and sometimes as high as thirty dollars. It increased during the past year thirty-three and a third per cent, which increase it is believed is permanent.

Following the discussion of log conditions, Secretary Defebaugh brought up the question of whether the association should join the newly organized Chamber of Commerce of the United States. It was voted that application should be made for membership and B. W. Lord was elected delegate to represent the veneer and panel association at the next meeting of that body.

It had been anticipated that discussion of standard weights for veneers and panels would prove particularly valuable. A special committee had been appointed to investigate this and to compile such a schedule of standard weights from information received by correspondence from the members of the association. It developed, however, during the committee report that the membership had responded very unsatisfactorily and the results as compiled showed such a marked variation that it was apparent that they were not actual weights but merely approximate weights. In view of the great variation it was not deemed advisable to take any action on the schedule but it was referred back to the special committee which was instructed to work the matter out on a more comprehensive and authentic basis and report back at the next meeting. Members were particularly requested to keep actual figures on veneer and panel weights so that they could respond to the committee's request on an intelligent basis and enable the committee to compile a schedule of standard weights which could be profitably adopted by the association. It was pointed out that in compiling standard of weights on crated veneer, one of the most serious drawbacks is the lack of uniformity in crating methods. To remedy this it would be necessary to create a standard method of crating or to compile weights on uncrated stock and let each man figure weights on actual stock, including actual weight on his own crating.

Reports of standing committees followed. Committees on constitution and by-laws, resolutions and arbitration had no reports to make. The executive committee recommended that the work of the association be carried out along the same lines as during the past year. It stated that it has under consideration various features which will be taken up at the next meeting. The membership committee reported on its efforts to secure new members for the association, which efforts resulted in the application of six concerns for membership. These concerns are the Buena Vista Veneer Company of South Bend, Ind.; Kile Manufacturing Company, Akron, O.; Knoxville Veneer Company, Knoxville, Tenn.; Jamestown Panel Company, Inc., Jamestown, N. Y.; Georgetown Manufacturing Company, Georgetown, Miss.; W. H. Gillen Veneer Company, Jackson, Ala. These applications were accepted.

Next followed the report of the railroad committee by B. W. Lord, chairman.

The question of the elimination of the railroads' practice of considering thickness in classification for veneers brought forth considerable discussion. The official classification specifies that veneers one-sixteenth of an inch thick and under take veneer rate and stock thicker than one-sixteenth of an inch takes lumber rate. In order to eliminate this classification, Mr. Lord reported that it would probably be necessary to eliminate fancy figured woods and quartered oak, which would undoubtedly cause considerable hardship to mills handling such stock. Mr. Lord recommended that the matter be left as it is at present. Another member expressed himself as believing that the railroads should put thick and thin lumber for both lumber and veneers under one classification. He said that in shipping mixed cars, different rates were charged on the different character of shipments. The speaker said that he understood that Illinois manufacturers can ship mixed carloads of thick and thin stock under one rate. It was pointed out by Mr. Lord that this is entirely an intra-state proposition. He said further that in shipments where there is a small amount of thin stock which takes the veneer rate and the bulk of the stock is heavy, the heavy stock can be billed at a minimum carload rate and the thin stock as a local shipment. Mahogany, according to the speaker, takes the first class rate and cannot be shipped as lumber under the official classification. Mr. Lord said there are three classifications in this country—the official, southern, and the western—and that they all differ as to the minimum thickness and as to weights. He cited the condition as existing on shipments from his mill in Kentucky, saying that if he shipped through the official district the shipments are under control of three different classifications, so that not only the rates may be different, but the minimum weights also. Mr. Lord said that there seems no way at present of changing this condition, but that the Uniform Classification Committee is trying to put into effect more reasonable classifications. This committee has not yet come to lumber products, but it is hoped it will do so in the near future. President Jarrell commended Chairman Lord of the railroad committee on his work. He said that the association had conferred with the Western Classification Committee and that they had the information just as Mr. Lord explained it: namely, classification on stock one-sixteenth inch and above as lumber and everything under that as veneer.

Mr. Lord said his concern discontinued cutting one-sixteenth inch stock two years ago and now manufactures one-fifteenth instead. He quotes on one-fifteenth and bills it out that way, the orders being accepted as one-fifteenth. The railroads, however, put the veneer rate on the car and Mr. Lord took it up with the Southern and Western Classification committees. The gentlemen sent representatives to Mr. Lord's mill, where he proved to them that he manufactured only one-fifteenth inch stock and shipped it as such. The committee of representatives took it up with the different railroad officials, who would not, however, accept the one-fifteenth stock as lumber. The question, however, was fought out to a finish and several months ago the railroads rescinded their former decision and are now accepting the one-fifteenth inch stock on the lumber rates. The difference is .1240 of an inch. Mr. Lord said that he believed the Uniform Classification Committee will figure on the basis of one-sixteenth and thinner instead of on the Southern and Western Classification of one-eighth inch and thinner. President Jarrell closed the discussion with a statement that the committee is ready at any time to take up any matter which any member submits of interest to the question of railroad classification.

The nominating committee recommended the re-election of the present officers as follows:

PRESIDENT, C. T. Jarrell.

FIRST VICE-PRESIDENT, B. W. Lord.

SECOND VICE-PRESIDENT, A. E. Gorham.

THIRD VICE-PRESIDENT, C. H. Barnaby.

SECRETARY AND TREASURER, E. H. Defebaugh.

Three directors to take place of three whose terms expire: J. C. Hill, H. J. Barnard, M. W. Perry.

It was decided by vote to hold the next meeting of the association at Chicago. At a previous meeting it was decided that all annuals shall take place at Chicago, but the meeting place for the semi-annuals has been open. The meeting then adjourned.



Glue Economy



Editor's Note

The importance of glue to the panel manufacturer is a subject too important to be left to a casual article, read by J. W. Beiger, mechanical engineer and glue expert, Mishawaka, Ind., before the National Veneer and Panel Manufacturers' Association in convention at the Auditorium hotel, Chicago, December 10-11, 1912, gives some valuable suggestions on the subject.

We will for a few minutes look at the source and manufacture of glue. The organisms of all animals, but more especially of the higher classes, contain tissues which are insoluble in cold as well as hot water. However, by continued boiling, they become dissolved and yield on evaporation of the solution a glutinous mass. By further drying this mass exhibits, according to the degree of purity of the material, a more or less transparent and brittle substance, which in its pure state is devoid of color as well as odor; it swells up in cold water and dissolves upon being heated in that liquid. This substance—that is, the conversion of the so-called glue or gelatine yielding tissue—is what is known to the trade as glue.

Neither glue nor gelatine exists ready formed in the animal organisms, except under abnormal conditions of disease, but they are the products of various transformations.

The raw materials used in the manufacture of glue consist of a variety of animal offal. The principal substances employed are refuse of tanneries, such as scraps of ox and other thick hides, the waste of workshops of leather dressers, etc. The tendons and intestines of many animals, rabbit and hare skins deprived of their fur, cat and dog skins, scraps of parchment, waste of tuners and button makers, and the offal of butcher shops and households help to swell the series of materials used for the manufacture of glue.

The materials are collected and sold either directly to a glue boiler, or to a dealer making a specialty of glue stock. The glue stock is then placed in large vats containing a strong solution of lime water. This frees it from all fleshy and bloody particles, and especially decayed matter. The stock is then treated with an acid so as to neutralize and preserve it. From here the stock is placed in large kettles and boiled. After separating it from all settlings and grease, it is put into coolers and allowed to chill, forming a stiff jelly. The jelly is then sliced and dried. It is then run through a crusher and broken up. This is the commercial appearance in which it is generally found.

So much for the source of glue.

A matter in which you will be more interested is how to determine the value and grade of a glue at the time it is delivered at your plant. There are few places where the consumers are equipped to scientifically analyze glue, and to those who are not it will be interesting to know just how this work is carried on, so that the covering capacity as well as the strength of a glue may be determined before any of the glue in question is put into the spreader.

This system is of vital importance to you, for without it it is rather dangerous business to experiment with a glue out in the plant and then put the reputation of your house back of that glue.

The glue manufacturer grades his glue in some cases by viscosity, in others by the stiffness of the jelly and the remainder by the price he can get for any old glue.

Taking the first means of testing, we will look into that and see of what value it is to you. By viscosity, we mean the body or thickness. For example, take milk and cream. Milk is thin and has a very low viscosity, while cream is thick and has a high viscosity. The above will also serve to explain that the viscosity of a liquid has nothing to do with the specific gravity, and cannot be determined by any floating glass instruments or hydrometers, which so many of



J. W. BEIGER, MISHAWAKA, IND.

the consumers believe.

To determine the viscosity of a liquid we allow a constant volume of that liquid to flow out of some containing vessel through a small opening at the bottom, and catch the time required to empty the vessel. The time in seconds is the viscosity, and the instrument is called a viscosimeter.

The value of this instrument to you can best be explained by an example. We will take the following conditions of a glue consumer—he is using a glue at 10 cents a pound. The viscosity of that glue in a 33.3 per cent solution is 15 seconds. Now he wishes to determine whether a certain glue he has received is worth the price quoted, and if a more economical glue for him to use. He will therefore make up a small batch of the glue in question and take its viscosity in a 33.3 per cent solution. We will assume that the result of that test was 10 seconds. That being the case, one thing is certain, the glue in question does not make up as heavy a liquid as the glue he is using, therefore it will be necessary

to add more of the test glue to the solution, so as to bring up its viscosity. By the use of tables and curves, he is able to determine that the glue in question will have to be made up in a 37.5 per cent solution so as to have the same viscosity as the glue he is comparing it with. That is, the glue he is generally using has a viscosity of 15 seconds in a 33.3 per cent solution, while it takes a 37.5 per cent solution of the test glue to give the same viscosity.

From the data now at hand it is an easy matter to figure the value of the glue, and the result of that calculation gives 8.9 cents. Therefore, this is the value of the glue to our consumer, and he will have to buy it at that price in order to get the same efficiency out of it as he is getting out of the glue he is using generally.

So that the above line of reasoning will be better understood, the following statement should be made: A batch of 100 pounds of liquid glue having a viscosity of 15 seconds, will cover the same amount of surface, if used in the same glue spreader, on the same kind of work, at the same temperature, regardless of the amount of dry glue there was put into that batch. Viscosity determines spread.

The word viscosity seems like a very scientific expression and is generally pronounced with great stress. But, gentlemen, it is only a term that tries to explain what every practical user of glue has endeavored to determine, the exact thickness of the body of glue. However, by the use of a viscosimeter there is no guesswork, and once the proper body of glue has been established for your work, you can always maintain that body, regardless of the grade of glue you have at hand. By being able to maintain a uniform body you have taken one step toward uniform work, and one step toward uniform cost of work.

While this system is not being used universally as yet, it is going to be used more and more as time goes on. It may seem strange to you that while there are a great many manufacturers of glue in this country, no two of them produce the same grades of glue, and stranger still, not any one of them can produce exactly the same grade from day to day. Each boiling must be analyzed for its grade. That being the case, unless you are checking up the quality of glue as it is delivered to you, there must be a variation in the grades of your glue. A statement of facts on this variation will seem very large, but there has been found on shipments of glue from the

same house, supposed to be the same quality and paid for at the price, a variation of 40 per cent in viscosity.

The second means of testing, viz., the jelly strength, is used very largely by the manufacturers in grading their product. The old finger test is being used in many places at the present time. This finger test is very inaccurate and is conducted as follows: Samples of the different glues as well as standard glues are all made up in the same per cent solution, and allowed to cool. They are then compared with the standards by pressing on the jelly with the finger to determine jellies having the same stiffness. Any glue having the same stiffness as one of the standards, is equal to that standard and priced according to the standard.

A more accurate way to test the jelly strength of a glue is to make them all up in the same per cent solution and allow them to come to a standard temperature. Then actually weigh the pressure required to force a plunger through the jelly. In making this test, the temperature is a very important factor, as one degree makes a difference of two pounds in the jelly strength. The greater the pressure required to force the plunger through the jelly, the better the grade of glue and the greater will be the adhesive power.

Referring to the standard glues as they are advertised on the market, the best grade has a viscosity of 34.5 seconds, and a jelly strength of 48 pounds, while the poorest grade has a viscosity of 6 seconds and a jelly strength of 7.2 pounds. From the consumer's standpoint, he cannot be guided by either one of these tests alone; he must take both, for in the case of viscosity foreign matter is apt to be in the glue, which would make it appear to be very heavy in body, but upon taking the jelly strength we find that it is low, therefore the viscosity was not the true viscosity of the grade, but was due to foreign matter. A glue must have for its viscosity the proper jelly strength, and by making the two tests side by side, the true value of a glue can be determined.

Not only does this allow the consumer to take advantage of the best values that are offered him, but he is in a position to compel the glue manufacturer to deliver the same grade to him in every shipment. Should any shipment arrive that is not up to the standard he has the means of rejecting the shipment, and thus avoid any inferior glue getting into the work.

By the use of these same tests, the heat damage done to the glue as it is in use out in the plant can be determined, and where it is large, means to stop that loss are effected. In places where the consumers have the equipment to make these tests, it is a fact worth mentioning that with the very best of results as to quality of work, the cost is around two dollars per thousand square feet, and in places not equipped the cost is much higher, and in many places the quality poorer.

There are several good reasons why this system is not in common use by the consumers at the present time. The first is, that it is not to the interests of the glue manufacturers to have the consumers educated along these lines. Another is, that it has never been shown to them from a practical standpoint. The work was always laborious, and the results hard to get. By the present system all unnecessary work has been eliminated and the results are absolutely accurate, short and simple.

One other advantage of this system is that when the glue salesman comes to call on you, you can tell him the exact value of his article instead of having to listen to him expound on the value of his glue. You need spend no time with him, because you can pick the best value for yourself.

Leaving the laboratory and going into the plant, without a doubt the greatest loss is in the heat damage. A twelve-cent glue will lose in value at about the rate of one-half cent per pound per hour. This fact is hard to see, for as the glue is going down in grade water is being evaporated out of the solution. The two will offset each other and the body of the liquid will remain about the same. But, nevertheless, the quality of a joint made by a twelve-cent glue after it has been under the action of heat for ten hours, is no better than a joint made from a fresh batch of glue of eight-cent value. There are at present a great many paying a good price for glue and allowing the heat damage to cause them to use a very poor adhesive.

Equipment for making up a batch of glue in as short a time as possible, not allowing it to stand around or soak, having the apparatus so arranged that only a small amount of liquid glue is on hand at one time, and last, but not least, having it so the place can be kept clean and sweet, these are a few of the things an expert must look after for his clients.

There are other materials used as adhesives, and no doubt vegetable glue comes next to the animal glues. However, by shrewd judgment in buying and using of materials a saving equal to that in the animal glue can be accomplished.

In concluding, I wish to thank you for the opportunity of speaking here today. I only hope that you will be benefited by my remarks. If you have, then this address has accomplished its purpose.

Eucalyptus for Cordwood

The government has just issued Forest Service circular 210 in which the proposition of growing eucalyptus for cordwood is discussed. This is an attempt, and one of the first, to consider the growing of eucalyptus on its merit. If it is good for anything, it is good for cordwood, and a discussion along that line is refreshing. Although it is not very good cordwood, it has some merit as fuel.

The Forest Service, co-operating with the California State Board of Forestry, carefully measured a number of eucalyptus plantations in that state, some of the best as well as some of average growth. The object was to ascertain how much an acre will yield in a given time, what the cost and expense are, and what the income will likely be. Non-irrigated land, such as is suitable for grain farming, may be had in California at \$30 an acre. It will cost additional \$26.25 per acre to plant eucalyptus and care for it during ten years, by which time it will be large enough to cut for cordwood. The total cost up to that time is \$56.25. It may be expected that the wood will then be worth \$160 per acre. That is a profit of \$103.25 an acre in ten years, when the crop is taken off, and a ten years' wait for another crop will follow.

These figures are based on averages of a number of plantations. It is pointed out that no income except from cordwood need be expected, unless the trees are left to grow thirty or forty years to produce saw timber, and even then, a sale for any purpose except cordwood would be doubtful, because lumber from young eucalyptus trees is not in demand. It shrinks and warps too much. The claim that merchantable lumber can be sold from ten-year-old plantations is emphatically denied. Nobody buys such lumber. The average diameter of logs of that age is considerably under twelve inches when green, and they shrink about fourteen per cent in drying.

The fraudulent claims made by some of the eucalyptus promoters, who have land for sale, are exposed. Their offer of planted land at \$250 an acre is a good thing for them, but mighty poor business for the investor. It does not require much arithmetic to show a loss for the man who pays \$250 an acre for planted land, keeps it ten years, and sells the crop for \$160, which is \$90 less than he paid. The government report speaks directly to the point on this subject. "If the total amount paid out," it says, "exceeds \$160 per acre, obviously there is a loss of capital, aside from the failure to secure any interest upon it."

The report attacks another preposterous claim made by some of the California eucalyptus land promoters who represent that an acre of eucalyptus will produce 100,000 board feet of lumber in ten years. It is shown that the best thirty-two-year-old plantation in California scales only 57,820 board feet, by actual measurement. "It should be borne in mind," the report further says, "that nowhere in the history of the world has any such quantity of wood as 100,000 board feet been produced per acre in ten years."

It may pay to grow eucalyptus cordwood in California on cheap, unirrigated land, but on good, irrigated land it will pay five or ten fold more to grow fruit, or field crops, and even on unirrigated land it will probably pay better to grow wheat and barley. There is no evidence that the growing of this wood for lumber will pay anything under any circumstances; and according to the report it will not pay to grow cordwood except on a pretty large scale.

Possibilities of Cork Oak in U. S.

One is not apt to think of cork being a very important commodity, but in reality the importations of the United States of crude and manufactured cork now amount to considerably over four million dollars every year. Not a dollar's worth of cork is grown in this country although there appear to be no valid reasons why this should be so. The cork-producing territory of the world covers practically the whole of Portugal, extends eastward through the southern districts of Spain known as Andalusia and Estremadura, and from there northeast to include thousands of acres in Catalonia. Algeria, with Tunis, ranks next in importance in bark production, followed closely by southern France, including Corsica. Italy, Sardinia, Sicily and Morocco also contribute a share. The total area covered by cork forests is estimated at about four and one quarter million acres, producing annually about 50,000 tons. A large proportion of this is exported to the United States.

The cork of commerce, or "corkwood" as it is usually termed, is the thick outer bark of cork oaks, the most important species being *Quercus suber*. The natural growth or virgin cork, as the first stripping of bark is called, is so rough, coarse and dense in texture that it is practically useless. If it is removed carefully further development of commercial cork takes place and after eight or ten years is thick enough to remove. Subsequent stripings follow at regular intervals of about nine years.

The first commercial crop of cork is obtained from trees 35 to 40 years old, which have at that time a circumference of about 2.11 feet and yield cork worth about 30 cents a tree; the second crop, occurring between 40 and 50 years, is worth 58 cents a tree; the third crop, at the age between 50 and 60 years, is worth 94 cents; the fourth crop, between 60 and 70 years, \$1.40; the fifth crop, between 70 and 80 years, \$1.93; the sixth crop, between 80 and 90 years, \$2.56; the seventh crop, between the ages of 100 and 110 years, \$4.04 a tree; and the ninth crop, between the ages of 110 and 120 years, \$4.90 a tree; making a total of \$19.92 a tree.

Cork is stripped from the trees during July and August and care must be exercised not to injure the trees. By means of a long-handled hatchet or a curved saw the bark is cut through entirely round the base of the tree and at a point just below the insertion of the main branches. These two incisions are then connected by one or two longitudinal cuts and the bark pried loose with the wedge-shaped handle of the cutting tool. The larger branches are also stripped and yield thinner but generally a finer grade of cork than do the trunks. The thickness of the bark varies from one-half inch to two and one-half inches, while the yield ranges from forty-five to five hundred pounds, depending on the size and age of the tree. The bark is allowed to season for a few weeks and is then boiled and scraped. In this way it is cleaned and purified, becomes more pliable and soft, and can be flattened out readily for packing and shipping.

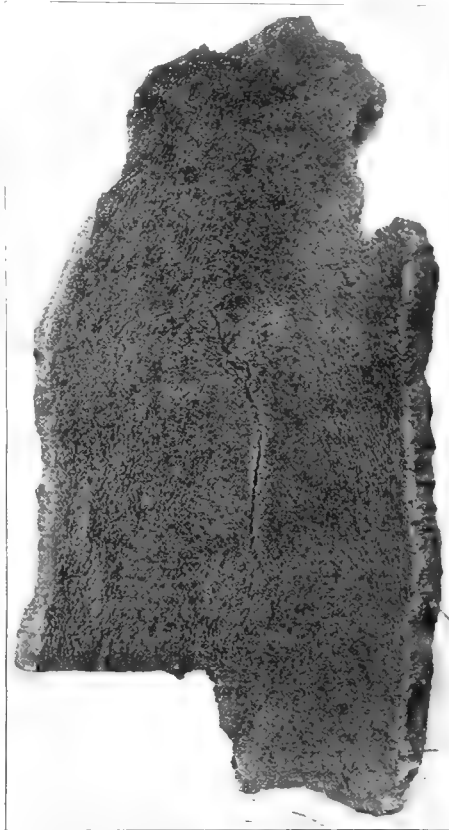
The uses of cork are very numerous. Besides the most common one, as stoppers for bottles, there are also: seine and gill corks, bobbars for fishing lines, instrument and fishing rod handles, bicycle grips, pen holders, discs and washers, gaskets in lubricator cups, life preservers, ring buoys, yacht fenders, shapes for mounting animal beads, buttons on fur coats, hat linings, glass polishing wheels, cigarette tips, and many others. The waste in the manufacture of these articles is made into composition cork, which can be used for many of the same purposes as the original. Cork shavings are em-

ployed in stuffing mattresses and boat cushions, in packing eggs and other fragile articles, and in making cork floor tiling. Cork flour is one of the chief constituents of linoleum. Granulated cork is widely used for heat insulating purposes, often in the form of cork board made up either with or without an asphaltic binder. The low conductivity and great durability make cork almost ideal for insulating cold storage and refrigerator rooms.

It should be interesting to note what has been done in the way of growing cork in this country. In 1858 the United States government distributed cork oak seedlings to interested persons in several states, but the Civil war interfered and the experiments were lost sight of. In the latter part of the 80's, 5,000 more seedling were raised and distributed by the Division of Forestry to people in the South Atlantic and Gulf Coast states and also to a few growers in Arizona and California. Repeated efforts to obtain reports of the results obtained evoked no replies, so that nothing definite is known regarding them.

There are, however, quite a number of cork oak trees of considerable size growing in South Carolina, Georgia, Louisiana, and California. So far as known there have been no attempts to treat these trees so as to enable them to form layers of commercial bark. Such experiments are much needed to demonstrate what quality of cork the trees grown in this country would produce. A number of the trees have been successfully grown at the forest experimental station in Chico, California, under direction of the University of California, and individual trees have done well when planted for shade and ornamental purposes in the Napa Valley, in California State Park in Sacramento, and other points in central and northern part of the state. No commercial plantations have been established, however.

Within the last year the United States Forest Service has planted cork oak on a considerable area on the Choctawatchee division of the Florida National Forest. Nearly all of the acorns came up, but those planted in January were killed back by frost and later sprouted from the stub. In January, 1912, a shipment of 100 pounds of acorns was received and planted on the Florida forest and at Summerville, S. C., in co-operation with the South Carolina Agricultural Experiment



INSIDE OF CORK FROM TREE GROWN IN LOUISIANA

Station.

One of the chief difficulties involved in introducing cork oak into this country lies in the poor keeping qualities of its acorns. The acorns mature in Spain, Portugal, Algeria or southern France in October or even November, and usually sprout the same winter. Most of such acorns shipped to this country are therefore received in a spoiled condition unless the greatest precautions are taken in their packing. Charcoal has been found to be the best packing material for preserving the acorns.

The minimum temperatures which cork oak can withstand are from 25° to 21° F. The maximum temperature is 104° F., and the minimum precipitation which is necessary for its growth is about 20 inches. On a basis of these figures it is apparent that the potential range of cork oak in this country is quite large. To what extent it will be economically profitable to produce our cork in this country instead of importing it from Spain or Portugal is a matter which can be decided only by actual experience.

S. J. R.

Maple is becoming almost as popular for making factory floors to run trucks on as it is for making the trucks themselves.



Need for the Veneer Jobber



Editor's Note

The following paper was read before the meeting of the National Veneer and Panel Manufacturers' Association at Chicago on December 10 by Henry Walscheid of the Veneer Manufacturers Company of Chicago. It proves the contention that the jobber is here to stay and will always have an important part in the veneer business.

When I was asked to read a paper to the National Veneer and Panel Manufacturers' Association on the advantages of the jobber, I hesitated because I have never done anything of that sort before, but finally agreed to do so because it has always seemed as though the millmen considered the jobber their enemy, and I believe if they would give this matter careful consideration they would find that they are not only their friends, but that their interests are mutual and the jobbers are necessary to the best interests of the veneer business from the millman's standpoint.

Before taking up some of the arguments for the jobber, I would like you to clearly understand what a jobber is.

A jobber, in my mind, is not one who represents a mill or sells on commission, but is one who buys outright and sells outright—one who buys car lots and in large quantities and generally sells in smaller quantities. A jobber buys on his own responsibility and knowledge; when he purchases stock and accepts it, the millman's responsibility ceases, and when this jobber sells this stock the responsibility of the stock, both as to inspection and credit, are entirely upon him. There are hardly any manufacturers to-day who do not sell to jobbers; there always have been jobbers; there are jobbers to-day and probably always will be.

In the first place, most of the veneer mills are located where the timber grows. The birch, basswood and maple mills are in the North, and as you all know, the gum, poplar and pine mills are in the South; the figured wood mills are scattered here, there and everywhere, consequently there are practically no mills that manufacture a complete line, such as the jobbers are obliged to carry.

The jobbing houses are most generally located in the largest veneer markets. This enables the consumer to secure stock on very short notice. Most of the veneer users cannot anticipate their wants and cannot wait to have the stock manufactured to their order or cannot wait for the stock to come from a distance.

As stated before, the jobber makes it a point to purchase in car lots, and not only does he save a great deal in freight and handling, but stock shipped in carloads goes through in very much better shape. Comparing it with local shipments, especially from where the timber grows, it is apt to be transferred several times at junction points, it is broken, damaged by handling, and if same is not properly packed it probably would not answer the purpose for which it was intended.

The largest veneer consumers order direct from the mills, and these orders are usually for dimension stock, so that the mills in manufacturing this dimension stock are certain to have a large amount of random stock and cut-downs which they accumulate. This accumulation is invariably bought by the jobber, as he is able to place this in small lots to people who do not order in large enough quantities to have their stock cut to dimension and to buyers who cannot wait, so that the jobber helps to keep the millman cleaned out of odd lots of stock, which the millman would find difficult to market to the consuming trade.

The veneer men have been trying for several years to encourage the use of log-run stock in random sizes and to discourage the use of dimension stock. The way to accomplish most good in encouraging the log-run and random size stock is through the jobber, as that is what he buys and sells, and the jobber has probably done a great deal to educate the consumers along these lines.



HENRY WALSCHEID, CHICAGO

Most of the veneer mills specialize upon woods in their locality. A jobber goes to the different mills and he will buy one or more carloads of their woods, taking different thicknesses, different sizes and different grades. He will ship this assortment of stock to his warehouse and then he will have similar shipments from other mills in other locations, so that he has a general line of stock suitable for mostly all wants.

A great many of the buyers want a small lot of mahogany, some walnut, some oak, several kinds of native woods in different sizes and thicknesses, and if they order this stock from the mills they would probably find it necessary to order from six to eight different mills. Some mills would ship more promptly than others, and consequently the consumer could not tell when he would get all of the stock together so he could start on his job. On the other hand, this consumer can go to a jobbing house, buy what he wants and just the quantity that would be required for his purpose; he can therefore afford to pay more to

the jobber than he would be obliged to pay direct to the mills. If he cannot find the exact piece of wood that would be suitable for his job, he is better able to judge a substitute than the millman, who in many instances does not know for what purpose the veneers are going to be used.

The panel manufacturers, no doubt, have a great deal of experience in this connection. They also know that the jobber is of great advantage to them, inasmuch as they get many rush orders for different kinds of work that requires many different kinds of woods. Immediate delivery must be had—and from whom? The only one qualified to serve them is the jobber.

Where the jobbing house is located in a large city there are a great many instances where work must be finished in a specified time. For instance, with interior finish work there is often a heavy penalty for delay. Suppose you eliminate the jobber, in which case the contractor is obliged to send away for his lumber and veneer, you can readily see how difficult it would be for him to collect his stock, depending upon shipments from the mills, with a possible shortage of cars, and then after this stock arrives it might not be up to requirements and it would be out of the question to wait for another shipment on account of the length of time it would take, and he would therefore be obliged to use the stock shipped to him, which would be unsatisfactory to all concerned.

As the situation is at present, when this interior finish man or any other contractor has a rush job, he goes to the jobber located in his town and he can probably pick up all the stock he needs for his entire order from one or two jobbing houses. The stock will be shipped promptly to his place or, possibly hauled right to his door, and then he is in shape to go to work. He can finish his job on time and know exactly what he will put into it.

Again oftentimes a man in getting out a figured wood job would have to submit samples of the veneer to the architect or his customer. Of course in such cases the jobber is not an advantage to the millman, but he is an absolute necessity to the buyer of veneers.

The above is mentioned to show the necessity of a jobbing house, which carries all kinds of plain and figured woods of different thicknesses, ready for immediate delivery. This is quite an advantage to the consumer, also to the manufacturer, and is a saving of time and expense to both.

A representative of one of the large veneer mills once told me that they never have over twenty-five or thirty accounts on their books. In our little business we carry over one hundred accounts, which shows how many more people the jobbers come in contact with, and a jobber is certainly more able, on account of his location and acquaintance, to market a great deal of stock that the millman would find very hard to dispose of.

There are so many buyers who use small amounts. The jobbers are able to sell them random stock, which they are compelled to match up for their work, when if all the users ordered their stock

direct the mills would simply be flooded with an unlimited number of small orders for special size stock, which I do not believe you would find profitable. I also think the jobbers relieve the millmen of a great many petty annoyances that otherwise they would have to contend with.

If you gentlemen will give this matter your careful consideration, and instead of feeling that the jobber is working against you, try to think that he is working with you. If both work together, I believe you will find that I am correct when I say that the jobber is an advantage to the millman.



Traffic Matters Around Memphis



A large delegation of Memphis lumbermen have gone to St. Louis to attend the hearing before the Interstate Commerce Commission in connection with the advance on hardwood lumber shipments from points in the southern territory to Canadian destinations. The lumbermen recently secured an order from the commission restraining the advance until the case could be heard on its merits. The outcome of this particular hearing is regarded as of wide importance because of its probable bearing on the other rate cases which are to come before the commission in the near future. The lumbermen are arguing that no further advances are either reasonable or justifiable and are asking that present rates be maintained or that these be reduced. Included in the list of those who went from Memphis are the following: James E. Stark, D. D. Nellis, S. B. Anderson, S. L. Sledge, Walker L. Welford, O. M. Krebs, S. M. Nickey, Elliott Lang, Frank May, W. A. Ransom, L. E. Brown and C. B. Dudley.

There was a hearing in this city during the past week in connection with the subject of estimated weights on hardwood lumber shipments, at which a number of the members of the hardwood lumber fraternity as well as prominent traffic men presented evidence. The commission has been holding hearings of this character at a number of other points. The lumbermen claim that the present system of weights is one that places them under a serious handicap. Commissioner Prouty was in Memphis. No decision has been announced but it is expected that after Chairman Prouty has reported the result of his hearing at Memphis something will be given out by the commission.

It is proposed to somewhat widen the scope of the Lumbermen's Traffic Bureau, although the exact method of accomplishing this proposition has not been decided upon. In the case of James E. Stark & Co., et al., vs. the Illinois Central Railroad Company, et al., an amended petition has been filed before the Interstate Commerce Commission. This step has been taken in order that there might be a number of firms shown as joint petitioners not included in the original action. The advances which are fought through this petition affect an extremely wide territory and lumbermen from many points are showing a keen interest in the work being done by the Lumbermen's Traffic Bureau in the direction of opposing these advances and also of securing lower rates than those now current. A number of them have asked to be allowed to participate in the work, and this is in reality the foundation for the movement which has been launched, looking to the creation of a traffic bureau which can take in outside members of the hardwood lumber trade as well as those of Memphis proper. There has been much discussion of this subject recently. In the meantime, it is announced from Washington that the advances proposed by the railroads have been indefinitely postponed, and it is suggested that there has been some disagreement on the part of some of the railroads in connection with the subject.

John R. Walker, a prominent attorney and rate expert of Washington, has been in Memphis for the past few days. He has been going very carefully over the rate matters to be presented before the Interstate Commerce Commission in behalf of the Lumbermen's Traffic Bureau of Memphis. He has held several conferences with the advisory board and other members of this organization, and an effort has been made to map out a plan of procedure calculated to secure

the best results in the forthcoming litigation before the commission.

Lumber interests are very much pleased with the recent decision of the Interstate Commerce Commission, holding that the railroads in Texas must issue through bills of lading on cotton shipments if the steamship companies are willing to honor these documents. The commission held that it had no authority to compel the steamship companies to accept these through bills but that it could and would compel the railroads to issue them if the steamship companies were willing to accept them. The steamship companies operating out of New Orleans have declared their willingness to accept through bills on lumber shipments through that port, and it is believed by lumber interests here that the commission will force the railroads west of the Mississippi river to issue through bills of lading on hardwood lumber shipments just as they have done in connection with the railroads in Texas on cotton shipments. This subject came before the commission December 21 in the case of the Anderson-Tully Company brought for the purpose of securing an order from the commission on this point.

Hearings on Schedule D

January 13 is the date set for a meeting of the Ways and Means Committee of the House of Representatives at Washington, for the purpose of drawing up a draft for a new bill on Schedule D covering wood and manufactures of wood, to be worked out by the new house after March 4.

Christmas for the Lumberman

The Christmas season is at hand; your money you must spend on folderols and knick-knacks and presents without end. As lumbermen we really think the idea would be good to send each friend a present made entirely of wood.

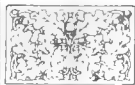
Unto your epicurean friend whose mouth is rarely shut, 'tis well to cloy his hunger with a piece of Butternut. While to your friend who's sporty (with the ladies quite a leader), you send a handsome little plank quite commonly called Cedar (seed-her).

To father who has lots of boys, who leave him in the lurch, a present that he'd welcome would be some strips of Birch. While to your Isaak Walton friend with wish for fishing good, he'd see the point most certainly if sent some nice Bass-wood. To your own girl, quite young of course, with laughter sweet and merry, you'd send a token for her lips—a nice red piece of Cherry. When Christmas day comes rolling round she'd take you for a goose, unless you wore your handsome clothes and dressed up slick and Spruce.

And even dear old Schneider, that sleepy canine bore, could have a toothsome bone boxed up in Quartered Sic-em-more.

The boys, Lord bless their little hearts! Just rush right out and tell 'em, they can have a nice toboggan made of A one Slippery Ellum. When Uncle Silas comes around to get his noonday snack, he'll hang his hat inside the house on Northern tama-rack.

All womankind, when Christmas comes, with fond emotions stir at any present from a man made up and trimmed with Fur. Or if you have a little one, and want to make things hum, just send by Santa down the flue a quarter's worth of Gum.



Use of Hardwoods in California



The California State Board of Forestry has published bulletin 3, devoted to the timber resources of the state, and particularly to the uses of woods by various industries in California. A footnote says that the statistics on which the bulletin is based were collected by C. Stowell Smith of the United States Forest Service, and cover one year, ending August 1, 1911.

The bulletin contains 114 pages, and is filled with valuable information, but unfortunately the editing was not well done, and the reader may encounter some difficulty in finding what he is looking for. However, if he is patient he will probably find it, for the report contains a little of nearly everything connected with the utilization of wood in the state. The greatest defect consists in not bringing together in one place the uses of a particular wood, so that an inquirer who is interested in that wood may get at one time all there is on the subject. Instead, it is necessary to go through the whole bulletin, picking out the desired information, a little here and a little there. The publication contains no index to the woods, by which they can be quickly found, but the industries are indexed. In one instance a single wood appears as though it were two woods, by giving it two names. It is listed first as "genisaro" (genesero), and as such is carried through the report, and under the name *prima vera* it is carried through the report a second time, making it appear that they are different woods. The error doubtless crept in through an oversight.

The defects in the bulletin are very small compared with its merits. It is a valuable publication, and contains information never before brought together. It shows much research and investigation. It is the first report of the kind ever issued for California. In scope and design it is similar to the state wood-using reports which the Forest Service has been publishing during the past three or four years.

California is not usually regarded as a hardwood state. It is not a large producer, but it consumes enough to make it of interest to hardwood dealers in the East. Some of the hardwoods used in the state were as follows:

	Feet.
Eastern white oak.....	25,624,091
Oregon oak.....	2,005,000
Japanese or Siberian oak.....	1,386,615
Eastern red oak.....	93,500
Eastern maple.....	1,017,950
Oregon maple.....	20,500
Eastern ash.....	701,698
Siberian ash.....	18,000
Oregon ash.....	14,600
Hickory.....	619,401
Elm.....	160,040
Black cottonwood (western).....	5,011,175
Birch (eastern).....	1,493,873
American mahogany.....	1,136,537
Philippine mahogany.....	33,792
African mahogany.....	33,620
Yellow poplar.....	565,158
<i>Prima vera</i>	286,818
Red gum.....	237,258
Beech.....	160,000
Australian ironbark (<i>Eucalyptus</i>).....	152,000
Black walnut.....	112,916
Teak.....	89,795
Cal. blue gum (<i>Eucalyptus</i>).....	55,350
Eastern cottonwood.....	49,225
Locust.....	45,000
Basswood.....	27,995
California sycamore.....	17,000
Australian blue gum (<i>Eucalyptus</i>).....	13,000
Orange.....	8,450
Circassian walnut.....	8,000
Black cherry.....	7,575
English willow.....	5,470
California laurel.....	5,200
Manzanita (California).....	2,000
Mountain mahogany (California).....	1,000
Blue myrtle (California).....	1,000
Chestnut.....	1,000

Australian mahogany (<i>Eucalyptus</i>).....	1,000
Camphorwood.....	1,000
Osage orange.....	50
Boxwood (sawdust).....	By weight
Rosewood.....	By weight
Japanese.....	By weight
Lignumvite.....	By weight
Ebony.....	By weight

It will be noted that four of the woods listed in the above table are eucalyptus, but there are three species of it. The California blue gum and the Australian blue gum are the same, except that one is a planted tree in California, and the other a wild tree of Australia.

A good deal has been said of late concerning the value of eucalyptus grown in California. Promoters who have land for sale and who are interested in disposing of it for planting this tree, insist that the wood is first class and that fortunes await the planters of blue gum. Other persons have combatted that claim and insist that thus far the eucalyptus grown in California has had little value because of the wood's inferior physical qualities. The contribution which the California State Board of Forestry, in the bulletin, makes to the discussion is of interest. The purpose which the board has is certainly not to belittle any of California's resources, but to give them the best report possible. It may be assumed, therefore, that eucalyptus was given the best recommendation, consistent with truth, that was possible. The first use reported for it was in the repair of furniture (page 49 of the report). After saying that the wood is strong and finishes well, this is added: "One firm reports having manufactured 1,000 feet of blue gum into furniture. It was found that it was too heavy; the gum destroyed the glue joints; it was difficult to nail, and warped after finishing. This firm plans to experiment again."

The next reported use for it was as driving blocks in oil-well work, where dry logs from eight to twelve inches in diameter were employed. No statement is made as to its success or failure.

The third and last use reported for it was in vehicle manufacturing where it was tried for axle beds, bolsters, poles, reaches, shafts, bars. This comment follows: "One manufacturer reports having made felloes for a set of wagon wheels out of this material, which gave good service the first summer, but which rotted to pieces in contact with the ground when stored under a shed for the winter. Another manufacturer reports its use to be satisfactory while moisture is retained, but it becomes very brittle when thoroughly dry."

The uses of different species of eucalyptus from Australia were apparently satisfactory, as no adverse report occurs in the bulletin.

The values of some of the hardwoods employed by manufacturers in California are of interest. The figures represent the average cost per thousand board feet delivered at the factory:

Plain white oak.....	\$ 76.15
Quarter-sawed white oak.....	89.21
Oregon oak.....	48.13
Japanese or Siberian oak, plain.....	91.09
Japanese oak, quartered.....	111.46
Red oak.....	58.85
Black cottonwood.....	23.51
Common cottonwood.....	96.48
Birch.....	79.85
American mahogany.....	178.53
Eastern maple.....	80.67
Oregon maple.....	58.83
Eastern ash.....	93.47
Siberian ash.....	82.78
Oregon ash.....	44.93
Hickory.....	101.23
Yellow poplar.....	98.39
Red gum.....	79.53
Elm.....	50.85
Beech.....	100.00
Black walnut.....	157.69
California blue gum (<i>Eucalyptus</i>).....	88.06
Australian blue gum (<i>Eucalyptus</i>).....	105.85

Basswood	93.44
Orange	100.00

Several hardwoods used in California have not yet appeared in Eastern markets, or at most in very small quantities.

Yucca is not, strictly speaking, a hardwood or soft wood. It is a palm and is cut in veneers from logs about a foot in diameter.

California sycamore is not the same species as the eastern. Trees are smaller, but the wood is by some considered superior.

The state grows the orange and olive wood demanded by California manufacturers of manicure sets and novelties.

California laurel is an evergreen, but otherwise resembles the eastern sassafras in size and appearance. The furniture of the Palace hotel, destroyed in the San Francisco earthquake, was of this wood.

Manzanita (the name meaning "little apple") is a small, crooked tree, with dark red wood, so brittle that when a branch is broken, the pieces fly in various directions.

Mountain mahogany is not a mahogany, but its dark-colored wood is made into small articles. Trees are generally only a few inches in diameter.

Blue myrtle, or mountain lilac, is seldom ten inches in diameter. The wood is yellowish brown.

The report does not make much of the California tanbark oak, probably for the reason that it was not found in use. It is the opinion of some persons that this oak has a future for other purposes than supplying tanning material. Though it checks badly in seasoning, its hardness and figure qualify it for service as flooring and furniture. The largest trees are from sixty to eighty feet high and two or more in diameter. It is an evergreen and the form of leaf suggests chestnut. It is the most important source of tanbark on the Pacific coast.

A summary of the wood-using industries of California, with the

quantity of wood used, and the cost, is shown in the table which follows:

TABLE 2 SUMMARY OF CONSUMPTION BY INDUSTRIES

Industries	Quantity consumed		Average price per 100 feet	Total cost	Grown in California percent	Grown out of California percent
	Feet board measure	Percent				
Boxes and crates	309,496,285	46.8	\$15.62	\$4,837,880	74.1	21.9
Sash, doors, etc.	131,519,496	19.9	22.78	2,999,841	73.6	26.4
Planing mill products, ..	96,468,422	14.9	31.20	3,023,410	73.8	26.2
Cooperage	36,347,835	5.5	19.12	1,789,465	7	93
Miscellaneous	19,109,927	2.9	11.20	213,884	0	100
Ships and boats	18,261,570	2.8	39.84	728,496	12.0	88.0
Tanks	17,209,431	2.6	38.06	655,150	74.8	25.2
Furniture	7,345,435	1.1	34.77	255,254	25.5	74.5
Woodenware and novelties	6,400,800	1.0	30.02	196,133	0	100
Fixtures	5,078,627	0.8	66.11	333,751	26.4	73.6
Vehicles	3,133,495	0.5	85.74	268,667	4.6	95.4
Caskets and coffins	2,568,000	0.4	2.00	51,360	66.7	33.3
Trunks and valises	2,017,885	0.3	27.08	54,645	18.0	82.0
Agricultural implements ..	1,075,900	0.2	36.86	39,656	30.7	69.3
Patterns	680,290	0.1	51.97	35,873	86.2	13.8
Car construction	547,000	0.1	39.66	21,693	31.1	68.9
Frames and moulding	480,294	0.1	90.39	43,412	10.5	89.5
Elevators	434,000	0.1	35.06	15,215	14.0	86.0
Refrigerators, etc.	371,000	0.1	30.49	11,286	2.2	97.8
Instruments, musical	282,750	0.1	59.35	15,001	63.7	36.3
Machine parts	250,991	0.1	43.77	10,986	27.4	72.6
Boxes, tobacco	213,500	0.1	15.40	26,345	7.5	92.5
Signs	155,000	0.1	70.00	10,850	96.5	3.5
Dairymen's supplies, etc.	130,000	0.1	24.81	3,225	47.0	53.0
Sporting goods	65,800	0.1	76.89	5,060	0.0	100.0
Pumps	17,800	0.1	22.39	1,119	0.0	100.0
Artificial limbs	15,270	0.1	138.63	2,101	87.7	12.3
Machinery, electrical	14,050	0.1	78.00	1,096	0.0	100.0
Instruments, scientific	12,407	0.1	73.14	906	0.0	100.0
Bungs and faucets	12,022	0.1	53.19	639	17.6	82.4
Wood carvings	11,500	0.1	59.77	685	0.1	99.9
Chairs	18,750	0.1	128.37	2,408	0.0	100.0
Brushes	12,885	0.1	83.15	1,071	26.7	73.3
Laundry appliances	8,543	0.1	55.83	477	0.0	100.0
Printing material	6,075	0.1	153.88	922	0.0	100.0
Miscellaneous, given in lbs.				13,733		
Total	661,806,478	100.0	\$33.74	\$15,712,494		
Total grown in California					438,796,073	
Total grown out of California					223,010,405	



Preventing Insect Damage to Hickory



Of all American hardwoods none would be more difficult to replace with a substitute than hickory. There is a greater demand for hickory for distinctive uses than for any other wood, and the rapid decrease in available supply is a matter of serious concern. In 1910 the reported cut of hickory lumber was 272,252,000 board feet. An additional amount, equivalent to approximately 150,000,000 board feet, was worked up directly into other products such as spoke billets, handle blanks, rim strips, etc. This does not include wood used for fuel or wasted in logging and manufacture.

One way of lessening the drain on the hickory timber is to prevent the waste of seasoned stock or finished material due to powder-post beetles. Most insects require considerable moisture for their activities, so that all that is necessary to guard against their attacks is to season timber thoroughly and maintain it in that condition. The powder-post beetle on the contrary prefers dry wood and the damage from its ravages has been enormous. Stored supplies of handles, rims, shafts and many other hardwood articles are likely to suffer severely, sometimes resulting in complete loss. The extent of the damage is usually concealed from view unless careful inspection is made.

Only the sapwood is attacked by the powder-post beetles. The larvae feed on the starch and other forms of plant food which are found in the sapwood but not in the heartwood, and reduce everything to a fine powder except a thin outer shell. Hickory, ash and oak seem to be the most liable to injury. When finished material is once attacked it is usually worthless for the purposes for which prepared, and therefore must be replaced with new material. It is estimated that the average losses have been as much as ten per cent on nearly all sapwood material that has been in storage more than a year. The decided preference of manufacturers for white hickory (i.e. sapwood) accounts for the especial liability of hickory products to attack.

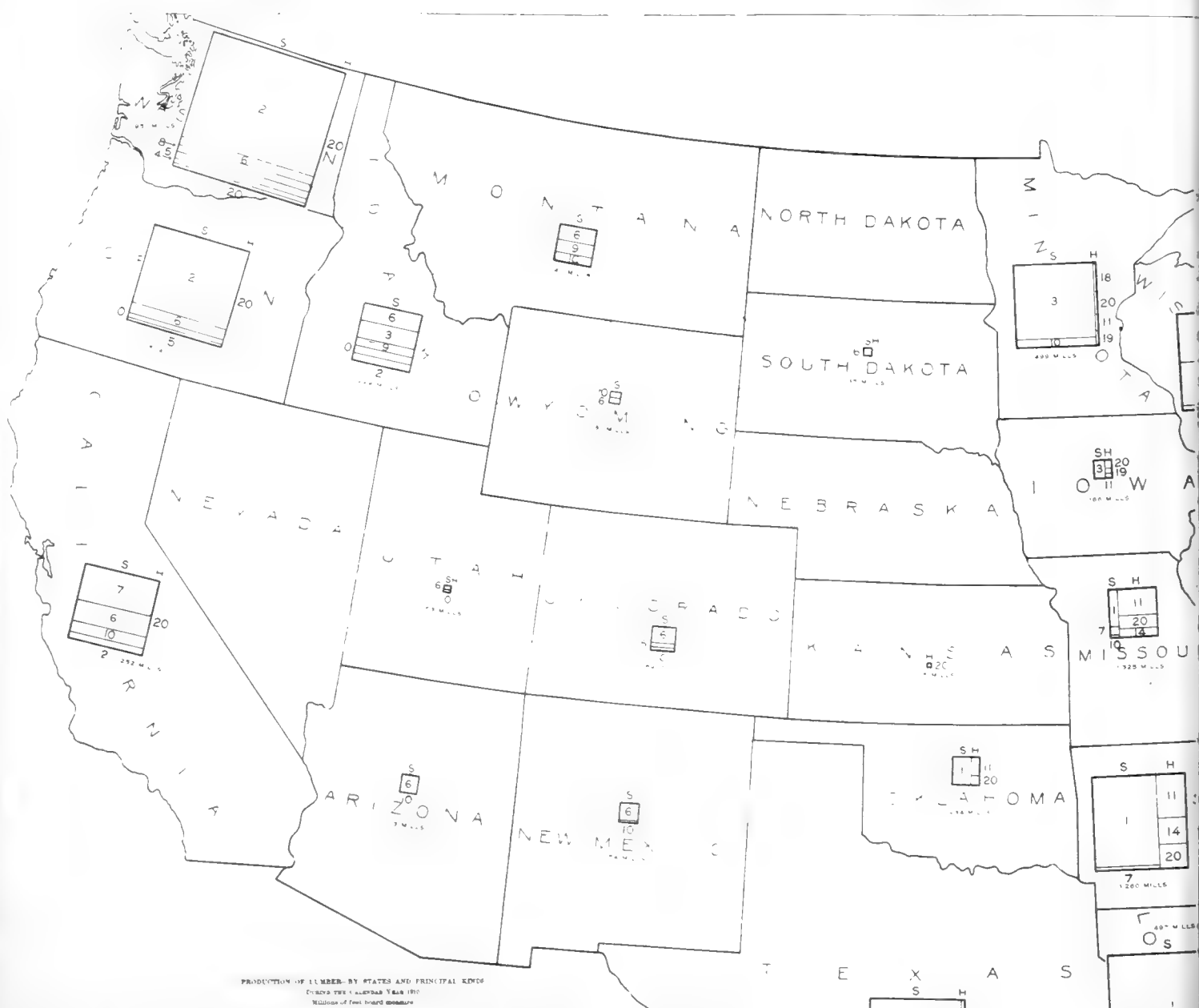
Such injury, however, can be prevented or at least greatly lessened by taking proper precautionary measures. At least once a year all material in the yards and storehouses should be inspected, preferably during November or February. The presence of powder-post beetles is indicated by fine powdery boring dust on the surface of the material or on the floor beneath it. Material showing such attacks should be removed at once and either destroyed or otherwise disposed of. If there is any old and useless sapwood material about, it should be sorted out and removed to prevent it affording favorable breeding places for the insects.

So far as possible no infested material should be allowed entrance into lumber yards or store rooms. A careful inspection is necessary to prevent this, but it is well worth the effort.

It is also a good plan to classify all dry or seasoned hardwood stock according to age and to kind of wood. Since material one year old and over is far more liable to injury, effort should be made to utilize it first. If sapwood and part sapwood stock is separated from pure heartwood there will be less to inspect. In the same way the species most liable to attack should be separated from the others to reduce the labor of inspection.

Damage by powder-post insects can usually be prevented by treating the sapwood with linseed oil or kerosene, either by immersing it in the oil or by applying the oil with a brush. The application should be made as soon as possible after the articles are finished from uninjured stock. Slightly injured articles should be tested for required strength and, if found of sufficient value for retention, should be treated with kerosene oil. They should not be returned immediately to the store room but kept by themselves for sufficient time to determine the success of the treatment. If new dust appears, a second application of oil should be made or the material destroyed. These measures are not difficult to carry out and will mean a great saving of valuable material.

S. J. R.



PRODUCTION OF LUMBER BY STATES AND PRINCIPAL KINDS
DURING THE CALENDAR YEAR 1910
Millions of feet board measure

States	Softwoods										Hardwoods										Grand total softwoods and hardwoods
	1 Yellow pine	2 Douglas fir	3 White pine	4 Hemlock	5 Spruce	6 Western pine	7 Cypress	8 Cedar	9 Larch or white pine	10 All other	11 Oak	12 Maple	13 Tule	14 Red gum	15 Chestnut	16 Birch	17 Buckeye	18 Elm	19 All other	20 Total	
Alabama	1																				1
Arkansas	1																				1
California	1																				1
Colorado	1																				1
Connecticut	1																				1
Delaware	1																				1
Florida	1																				1
Georgia	1																				1
Idaho	1																				1
Illinois	1																				1
Indiana	1																				1
Iowa	1																				1
Kansas	1																				1
Kentucky	1																				1
Louisiana	1																				1
Maine	1																				1
Maryland	1																				1
Massachusetts	1																				1
Michigan	1																				1
Minnesota	1																				1
Mississippi	1																				1
Montana	1																				1
Nebraska	1																				1
Nevada	1																				1
New Hampshire	1																				1
New Jersey	1																				1
New Mexico	1																				1
New York	1																				1
North Carolina	1																				1
Ohio	1																				1
Oregon	1																				1
Pennsylvania	1																				1
Rhode Island	1																				1
South Carolina	1																				1
South Dakota	1																				1
Tennessee	1																				1
Texas	1																				1
Vermont	1																				1
Virginia	1																				1
Washington	1																				1
West Virginia	1																				1
Wisconsin	1																				1
Wyoming	1																				1
All other	1																				1
Total	1																				1

* Not shown on diagram because the production within the State is relatively small in comparison with other kinds.
All other—No. 1 and No. 2—also include small unclassified quantities of the specified kinds.

PRODUCTION OF

PREPARED BY THE BUREAU OF FOREST SERVICE

Based on figures received by correspondents

Diagram in each State shows

The output of each State shows

The proportion of softwoods (S) to hardwoods (H)

The proportion of the kinds of wood

figures indicate the kinds of wood

4 The number of mills reporting

The average mill value per thousand feet

Graphic Map of Lumber Production

In the issue of HARDWOOD RECORD of October 10, 1911, was published a map for 1909 in which the latest statistics of lumber cut for the United States are shown by figures and diagrams. A similar map for the year 1910 is shown in this issue through the courtesy of O. T. Swan of the United States Forest Service. The figures given are the official returns and were collected and tabulated by the Bureau of the Census in cooperation with the Forest Service. Statistics of this kind are necessarily a year or more late, because of the great labor involved in collecting the information. The map as issued by the Forest Service is in colors, each one of the leading woods being shown by a separate color; but it is impracticable to reproduce the colors in the accompanying print, and the diagrams are depended upon to tell the story of lumber cut. A square inch diagram on the accompanying map represents four billion, the map herewith presented being only one-fourth the size of the original.

The map is largely self-explanatory, but some of the facts may be emphasized by calling attention to special features. The letter S accompanying the diagram means softwoods, and H hardwoods.

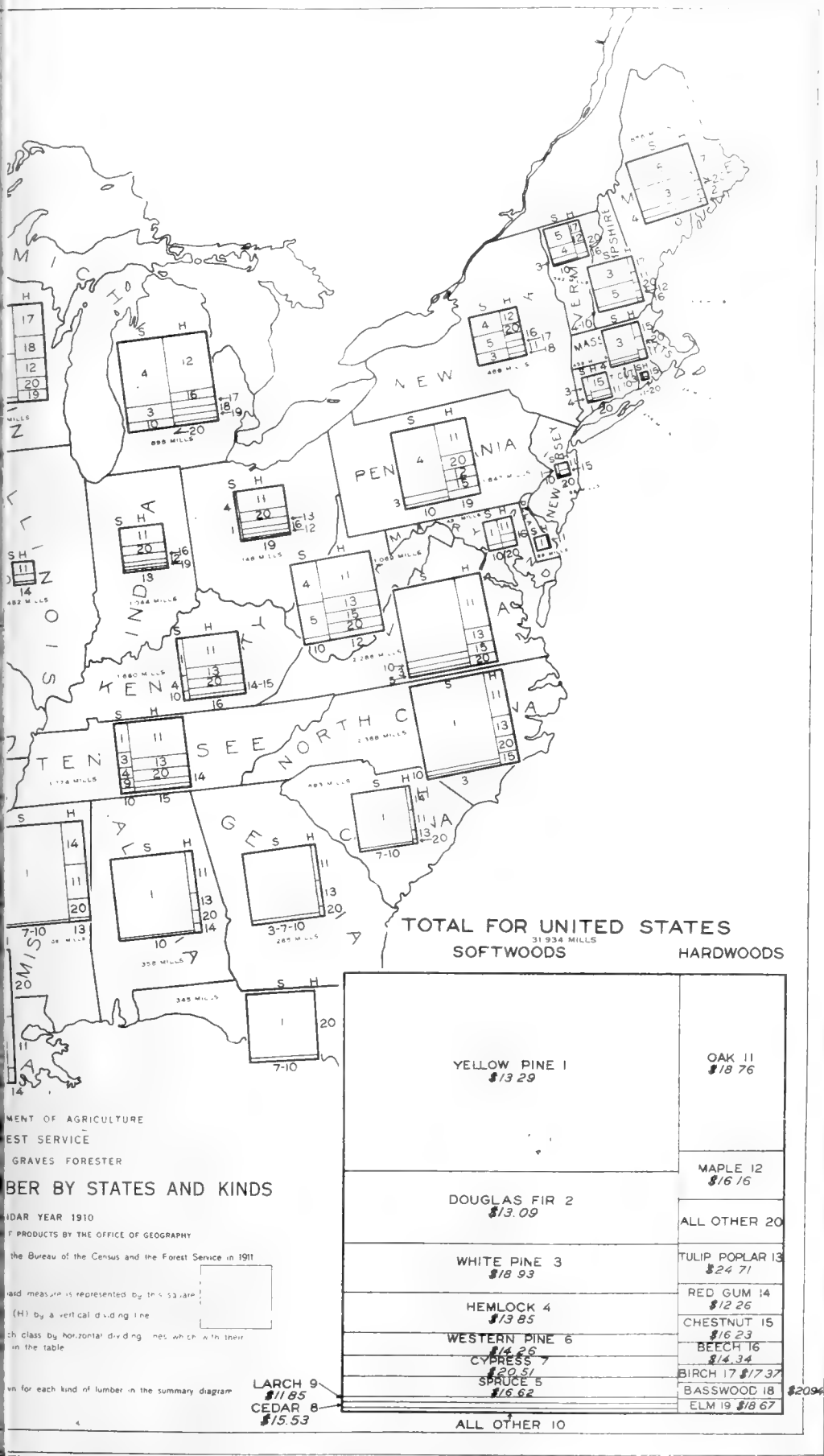
Figures refer to species, the first ten numerals to the softwoods and the second ten to hardwoods. Or, more specifically, 1 is southern yellow pine, 2 Douglas fir, 3 white pine, 4 hemlock, 5 spruce, 6 western pine, 7 cypress or redwood, depending upon the region, the redwood being found only in California, 8 cedar, 9 larch or tamarack, 10 all other softwoods.

Among the hardwoods 11 is oak, 12 maple, 13 yellow poplar, 14 red gum, 15 chestnut, 16 beech, 17 birch, 18 basswood, 19 elm, 20 all others.

The total for softwoods is 31,161,000,000, and for hardwoods 8,857,000,000; grand total, 40,018,000,000. For the sake of comparison, the totals for the year 1909 are given: softwoods 33,897,000,000, hardwoods 10,613,000,000; grand total, 44,510,000,000. There was a falling off in total cut from 1909 to 1910 of 3,492,000,000 feet, of which 2,756,000,000 feet was softwood and 1,756,000,000 was hardwood.

The falling off was doubtless more apparent than real, the census for the year 1909 being much more complete than that for 1910. In the former year reports were received from 48,112 mills, and in the latter year from only 31,983. The 16,129 mills from which no reports were received for 1910 were generally small concerns, yet if their average annual cut was only 220,000 feet, they would more than make up the apparent decline in lumber output from 1909 to 1910. It is therefore reasonable to conclude that there was no actual falling off in cut.

The apparent decline in hardwood cut was proportionately greater than in the softwoods.



That was doubtless apparent only, and was due to the fact that hardwood mills average smaller than those which cut softwoods, and consequently more of them were omitted when the 1910 census was taken.

Following are the leading hardwood states in which fewer mills reported in 1910 than in 1909:

	Mills Reporting 1909.	Mills Reporting 1910.
Mississippi	1,795	1,061
Arkansas	2,060	1,260
Missouri	2,076	1,325
Illinois	827	452
Indiana	1,604	1,044
Kentucky	2,372	1,660
Tennessee	2,643	1,774
Ohio	1,632	1,148
West Virginia	1,524	1,069
Pennsylvania	3,054	1,847
Michigan	1,323	898
Wisconsin	1,241	872
New York	2,308	1,468
Maryland	729	431
Virginia	3,511	2,286
North Carolina	3,307	2,368
Total	32,006	20,963

In the sixteen hardwood states named the decrease in the number of reporting mills was 11,043. It is not claimed that there was actually a decrease in the number of mills, but simply in the number reporting, as many of the small mills were not asked to make reports.

Because of the less complete returns for 1910, the basis of comparison of certain species with figures for the preceding year is destroyed. Maple is the only hardwood which shows as large a cut in 1910 as in 1909, and it shows an increase so small as to be practically nothing. The softwoods make a better showing and there was an increase on the face of the returns for Douglas fir, western pine, redwood, cedar, white fir, sugar pine, and lodgepole pine.

A comparison of average mill values for 1909 and 1910 for some of the principal woods are given:

	Average Mill Values, 1909.	Average Mill Values, 1910.
Yellow Pine	\$12.60	\$13.29
Douglas Fir	12.44	13.09
White Pine	18.16	18.93
Hemlock	13.95	13.85
Western Pine	15.39	14.26
Cypress	20.46	20.51
Spruce	16.91	16.62
Oak	20.50	18.76
Maple	15.77	16.16
Yellow Poplar	25.30	24.71
Red Gum	13.20	12.26
Chestnut	16.12	16.23
Beech	13.25	14.34
Birch	16.95	17.97
Basswood	19.50	20.94
Elm	17.52	18.67

No important differences in values occur. The general average mill value of all lumber cut in the United States in 1909 was \$15.38, and in 1910 was \$15.30, showing a very slight downward tendency.



Profit-Paying Sawing Wrinkles



For stock well manufactured the discriminating buyer of lumber will readily pay a better price than for the same grade of stock poorly or indifferently manufactured. He may well do so, too, for it is worth more; it will dress out and come smooth to the thickness expected of it, and not leave the marks of long saw teeth, and rough spots where the board was too thin. This is the best kind of argument in favor of the millman taking some pains to see that his stock is well manufactured, and it is also splendid selling argument for the man on the road selling the output of a mill.

The common interpretation of the term well manufactured, is to have the saw cutting smooth, and in a straight line, so that the lumber not only looks smooth, but also runs even in thickness, thus making it easy to dress and comparatively light on the planer. Also, we may add as a trimming to this interpretation, the careful edging and trimming of boards that there may be no ugly wane nor ragged ends. This latter interpretation is pretty well understood by the millmen, and is pretty generally followed by the progressive ones, so there does not seem to be much cause for complaint, except the occasional lapses on the part of some, and the failure on the part of others, the less progressive, to attach enough importance to proper manufacturing. But there is a much broader interpretation of this term than the commonly accepted one. We can go further with the matter and fare still better, make the term "well done" cover every step of the process from the cutting of the logs in the woods to the final delivery of the product to the consumer.

Well manufactured, in the broad sense, means getting the most out of the timber of the stock for which it is best fitted, as well as smooth, straight sawing, careful edging and trimming. That is why it begins in the woods where the logs are cut. The man marking off the logs for length should not only know timber, but he should also be well informed as to what the mill intends to cut, so that to quite an extent he can fit the length and character of the logs to the mill requirements.

The really competent mill sawyer knows how to place his logs, slab and box hearts, and what particular stuff any given log should best work into. Also, he knows the wrinkle of getting some clear stock here and there out of rough logs, so these points need no

elaboration. There are certain incidental things, though, that may be overlooked or not thought of. Striving to keep straight with the grain, or to keep the grain straight with the cuttings, is one of them.

There is a certain mill where the edging strips from inch oak are reduced to about $5\frac{1}{8}$ " by 1" and wound into a coil for a certain hoop-like use that will serve to illustrate the meaning here. It is evident that the grain in these must run pretty nearly straight for the strips to stand coiling even after steaming or boiling. It means that the sawyer is particular about his slabbing, and that the man at the edger is also careful at his work.

At another mill where wagon stock is quite a feature at times another detail comes out. Hickory, for example, is not only cut to single axle length before sawing, but the sawyer is duly mindful of the disposition to spring in even these short lengths. He knows, too, that it will not be as harmful for an axle to be sprung edge-wise as for it to be sprung sidewise. So in flitching, say for $3\frac{1}{2}$ by $4\frac{1}{2}$, he makes his flitch for the thick way wherever it is practical in flitching from the side of the log, for he knows the flitch is likely to do more springing in this original flitching off than it will in the final ripping up. It is not always that he can do just as he wants to in this, but he keeps it in mind, and it helps him turn out what is well manufactured stock in even a broader sense than the usual interpretation of the term.

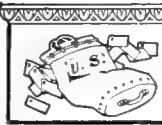
In flitching oak or cutting thick stock, springing oftentimes is an aggravating factor. It is possible by a little study and experiment to find not only what kind of logs do the most springing, but also how to saw them to reduce this trouble to a minimum. There are often hard sides and soft sides to logs, sides with growing strains set up in them and other sides comparatively free from these, and it helps to find out about these things and take advantage of this knowledge.

Then, beyond all this, in edging and trimming out, there is a chance to redeem lumber that might otherwise be classed as poorly manufactured—boards that are thin and thick in spots, or thin on one edge and thick on the other. Some of this will happen in the best of sawmills, and especially is it likely with the last board on

the carriage. If it is a wide board, thin on one edge and thick on the other, it may be ripped into two narrow boards, one of which will pass as full thickness and the other as a thin board. Or, if it is thin at one end, it can be cut to a shorter board of full thickness and the thin end used for whatever it will make. A board thick and thin, sent full length to the factory planer, will have to dress down to the thinnest point to be good, and thus there is heavy work for the planer and an unnecessary waste of good timber unless it

is cut so as to eliminate the thin part and use it for something else. One can dig up by patient and persistent study a whole string of details of this kind, each of which may seem insignificant in itself, but all of which make an important enough factor to be worth including in a broader interpretation of the term, well manufactured stock. Attention to these things should pay just as well and just as surely as it pays to make what the trade commonly terms well-manufactured stock.

J. C. T.



The Mail Bag



Any reader of **HARDWOOD RECORD** desiring to communicate with any of the inquirers listed in this section can have the addresses on written request to the Mail Bag Department, **HARDWOOD RECORD**, 537 South Dearborn Street, Chicago, and referring to the number at the head of each letter and enclosing a self-addressed stamped envelope.

B 365—Has Cottonwood Box Boards to Offer

Des Moines, Iowa, Dec. 12.—Editor **HARDWOOD RECORD**: We will have about 200,000 feet of good cottonwood box boards for sale, and we would appreciate your putting us in touch with a market for this class of material.

The above inquirer has been supplied with a list of a few concerns who would be interested in this material.—EDITOR.

B 366—Want Poplar Electric Casings

In the November 25 issue of **HARDWOOD RECORD** an inquiry was carried regarding a source of supply for poplar electric casings. As it was not quite clear just what is meant by this, the correspondent was requested to give a little further information on this subject. Below is the reply.—EDITOR.

Cincinnati, O., Dec. 12.—Editor **HARDWOOD RECORD**: We are in receipt of your favor of Nov. 11, and regret to advise that we are not ourselves in a very good position to say just what is required. From the inquiry we have from our customer, we understand that the stock is wanted in widths of 1½ inches, 1¾ inches, 1½ inches, 1¾ inches, 2 inches, 2½ inches and 3 inches. A larger proportion of 1½ inches and a smaller proportion of 2½ inches and 3 inches than of other sizes.

The stock is required to be dressed all sides and includes the necessary cappings as well as casings, that is, the top is separate from the body. We are not quite clear as to whether the capping is not moulded in some way.

We trust we may be successful in finding a good supplier of these, with whom we can arrange some business.

B 367—Wants Gum Veneers

New York, N. Y., Dec. 10.—Editor **HARDWOOD RECORD**: I use large quantities of rotary cut gum veneers ½ inch thick and 6 and 8 inches wide. Can you send me the addresses of several southern mills that could manufacture this sort of stock, large plants preferred?

Thanking you in advance for the favor.

The above party has been placed in communication with a number of southern mills manufacturing the stock desired.—EDITOR.

B 374—Hickory Picking Sticks

Liverpool, Eng., Nov. 30.—Editor **HARDWOOD RECORD**: We are asked to put in a quotation for a quantity of the above, the sizes of which are to be 2 feet 10 inches long, 1½ inches x 2 inches. We understand that it is the intention

of the buyers to cut them up the middle, that would mean we presume, ¾ inch x 2 inches, or 1 inch x 1½ inches. Perhaps you may have had a similar experience, and know what they mean. However, we shall be glad if you will get us a price, and the time of delivery.

No quantity is mentioned, so we cannot give you any lead in this direction. All they say is that each piece must be perfect, and any which does not come up to this strict demand, will have to be put out, as it would be useless.

A. SON.

The above firm has been given a list of several manufacturers of hickory dimension stock.—EDITOR.

B 368—Wants Oak Dimension Stock

Grafton, Wis., Dec. 13.—Editor **HARDWOOD RECORD**: We are in the market for ten cars oak dimension stock of the following sizes:

13 x 18 x 19,
1 x3 x 16,
1 x 22 x 16.

B 369—Has Black Gum to Dispose of

Breeding, W. Va., Dec. 11.—Editor **HARDWOOD RECORD**: Can you give me any information as to consumers of log run black gum? This stock is band sawed and can furnish it in any thickness.

Any information relative to above will be greatly appreciated.

The foregoing correspondent has been advised that the material he wishes to market is consumed in the manufacture of hubs, boxes, mauls, etc.—EDITOR.

B 370—Seeks Bone Dry Hickory

Newark, O., Dec. 13.—Editor **HARDWOOD RECORD**: We are in the market for about 75,000 feet of bone dry 4¼ hickory, grade of common and better or firsts and seconds. Positively no log run.

We would thank you for anything you could do for us in this matter.

COMPANY.

The above inquirer has been advised of several sources of supply for hickory.—EDITOR.

B 371—In the Market for Dimension Stock

Port Washington, Wis., Dec. 13.—Editor **HARDWOOD RECORD**: We are in need of oak, ash and hickory dimension stock of all sizes in large quantities.

B 372—Wants Specialties for Export

Toronto, Ont., Can., Dec. 12.—Editor **HARDWOOD RECORD**: Can you put us in touch with any manufacturers of broom handles, dowels, skewers and shovel handles, suitable for the English market, who are in a position to fill large orders?

We are told your paper circulates largely among this class of trade and would like to see a copy of it.

LTD.

B 373—Seeks Source of Supply for Dimension Stock

Elora, Ont., Dec. 11. Editor **HARDWOOD RECORD**: Would you kindly send us the address of

any manufacturer in the United States who cuts dimension hardwood, and oilize?

- & Co.

A list of manufacturers of dimension stock has been sent the above correspondent.—EDITOR.

B 375—Record Lake Shipments

A prominent New York hardwood concern maintaining an extensive branch at Buffalo reports an unusual amount of hardwood lumber shipped on the lakes during the past year. A portion of the letter from this concern says:

Buffalo, Dec. 14. —Editor **HARDWOOD RECORD**: We have had a very successful year here with our new yard in Buffalo. We now have a very complete electric remanufacturing mill and what we consider a very up-to-date hardwood lumber yard. We handled on the Great Lakes this year about 19,000,000 feet of hardwood lumber and still have one steamer, the "Picans," to arrive. This steamer will close our season on the lakes.

HAMILTON H. SALMON & Co.

B 376—A Correction

Hartford, Conn., Dec. 13.—Editor **HARDWOOD RECORD**: Your postal calling our attention to item on page 45 of the issue of December 10 is at hand.

The Hartford Lumber Company has been organized since 1889 and the company mentioned in your item must have been organized in some other state, as our secretary of state would not allow an organization of another company under the same name as ours.

THE HARTFORD LUMBER Co.,

Per Wm. J. RILEY, Treasurer.

This should have read Hartford, Vt.

Prolonging Life of Crossties

The Forest Products Laboratory at Madison, Wis., has published bulletin 118, which should be of much interest to railroad men. It is a summary of various publications dealing with timber treatment to hinder decay, which have been issued in recent years by the government. It is stated also that much has been taken from unpublished reports, and to that extent the bulletin is new. Three phases of the subject are discussed: Treating the wood with chemical preservatives; protecting the ties from mechanical wear; and the use of sawed in place of hewed ties. It is claimed that by these three means the enormous consumption of crossties in the United States can be reduced by at least one-half, with a yearly saving to the railroads of at least \$16,000,000.

In 1909, the railroads of the United States, including steam and electric, bought wooden crossties to the number of 123,751,000, at a cost of \$60,320,700. Thirteen per cent of these were purchased for new construction, the others were used for renewals. On an average for the whole United States, 358 ties per mile were removed from tracks and were replaced by new ones. The average cost per tie, exclusive of labor of handling, was 49 cents, or a cost to railroads of \$175 per mile, which for the whole country amounted to \$52,500,000. That heavy expense was paid by the railroads to make good the losses by decay and mechanical wear. To produce the ties for renewals it was necessary to cut about 710,000 acres of timberland, averaging 150 ties or 5,000 board feet per acre.



News Miscellany



The "Tarriers" Meet

Irish Night, Saturday, Dec. 14, at the Chicago Lumbermen's Club was another example of the splendid ability of the entertainment committee of the club. "Bob" Sullivan and "Bill" Eager performed their duties with unusual thoroughness, much to the delight of the many members of the club who were in attendance.

The entertainment committee followed the wise policy of engaging professional talent to assist the local talent with which the club is unusually well favored. The old saying "familiarity breeds contempt" usually makes its truth pretty well manifest at such gatherings where the entire entertainment is furnished by members. An excellent line of professional talent was provided, including a male quartet, a short skit by two young hopefuls of the other sex, and a stellar performance by Miss Vera Long, who got close to the hearts (and it might be added to the arms) of various members of the club. It may be poor policy to publish an account of this meeting, as undoubtedly if it got into the hands of any of the wives of some of the dignified club members they might consider it suitable grounds for divorce. However, if no names are mentioned it can probably be published with impunity.

The feature of the evening was the Irish theme which was carried out through all the performances. Irish songs were sung by the quartet, and "Bob" Sullivan acquitted himself very pleasingly with a couple of solos, which "the Chauncey Olcott of the Lumbermen's Club" can "get off" in a way equaled by no one.

The refreshment features were beer and sandwiches served at long tables. The members were also provided with clay "jimmies." Young and old, dignified and boyish members of the club were all compelled to don green paper caps.

On the whole the evening was a decided success, and the attendance entirely worthy of the efforts of the entertainment committee.

Banquet of the Sawdust Club

The Sawdust Club of the Union League, Philadelphia, held its annual banquet at the Union League club house, Dec. 11, 1912. This select body of lumbermen, who are also members of the famous Union League, is particularly distinguished for its original and unique entertainment of members and guests. Although less spectacular than in former years, the program this year was equally enjoyable, as a concert, orchestral and vocal, in which some of the finest classical compositions were rendered was the principal feature of the evening. The walls of the banquet hall were completely concealed by appropriate Christmas trees and other greenery gracefully disposed, and on the four sides columns were erected on which canaries in cages poured forth a continual melody. The table was of oval shape, in which was cut a large oval hollow, which was artistically filled with a huge bank of ferns and poinsettias, in the midst of which were inserted electric bulbs for further enhancement of beauty.

Frank C. Gillingham, president of the club, extended a hearty welcome to the members and guests, after which John T. Riley officiated as toastmaster, an office for which he has an acknowledged happy gift. Speeches were made by George V. Massey, Judge W. W. Porter, James Sherlock Davis and Richard S. White. A handsome solid silver penknife, on which were engraved the initials of each recipient, was encased in a satin-lined box bearing the name of each member and guest and placed before each plate, serving as place card as well as souvenir.

The menu, names of members and guests and musical program were published in booklet form, of which the fine style of lettering is notable,

and the cover distinctly a thing of beauty: the latter is a skillful composition representing the curly maple with the tint of mahogany, on which rich background the name of the club and date of annual in artistic gift lettering show to advantage. The annual of 1912 was, as usual, a successfully conducted affair and largely enjoyed by all present.

Memphis Club Elects Officers

John M. Pritchard of the John M. Pritchard Lumber Company will preside over the Lumbermen's Club during 1913. He was chosen president at the annual election held Dec. 14, having defeated John W. McClure of the Bellgrade Lumber Company. The race between these two gentlemen was very close. The election was one of the most warmly contested in the history of the club and the interest was at a very high pitch. The other officers elected at the same time follow:

First Vice-President: Harry B. Weiss of George C. Brown & Co.

Second Vice-President: D. D. Nellis of John M. Woods & Co.

Secretary-Treasurer: Charles G. Kadel of the P. F. Stone Lumber Company.

Directors: L. W. Ford of the Goodlander-Robertson Lumber Company, James V. Rush of Moffet, Bowman & Rush, J. S. Morris of the Bennett Hardwood Lumber Company.

The newly elected officers, including Mr. Pritchard, pledged their heartiest efforts in behalf of the club during the administration. They were all duly appreciative of the honors conferred upon them and said that they would try to show their appreciation through their accomplishments. Those who were beaten accepted their defeat in a most philosophic manner and without any trace of bitterness whatever. This was quite clear from the fact that they pledged their loyalty to the club and asserted that they stood ready to do whatever they were called upon to do.

The newly elected officers will assume their duties at the first meeting of the new year. The retiring administration is headed by Frank B. Robertson of the Anderson-Tully Company, who has made a remarkably successful president.

Charles Barnaby, president of the National Hardwood Lumber Association, was a guest during the election. He was called upon and said that he was very much pleased to be in Memphis during an election of the club and that he was all the more delighted because the club had honored an Indiana boy with the highest office in its gift. He said that both Mr. Pritchard and Mr. McClure were very highly thought of by the "powers-that-be" in the National Hardwood Lumber Association, as both were members of one of its most important bureaus, that on inspection. Mr. Barnaby referred to other pleasing features of his Memphis visit and said that the only disagreeable thing that had happened was the fact that he had been mistaken for Charlie Ransom. He did not mind being taken for the gentleman in question except for the manner thereof. He said that shortly after his arrival at the Peapody Hotel he was walking through the corridor and some man said in a rather loud voice: "There goes that d——d fellow, Ransom, now."

St. Louis Club Elects Officers

The regular monthly dinner and business meeting, as well as the annual election of officers of the Lumbermen's Club of St. Louis, took place at the Mercantile Club, Tuesday evening, Dec. 10, at 6:30.

After the dinner, a toast was drunk standing, in silence, to the memory of C. F. Liebke of the C. F. Liebke Hardwood Mill & Lumber Company,

and C. F. Querl of the Chas. F. Querl Lumber Company, two members of the club who had died during the last twelve months.

Immediately after the dinner, and before the regular business was taken up, Harry B. Hawes spoke to the members of the club on the Home Rule Bills, drawn up by the Business Men's League and endorsed by it. The bills were endorsed by the club.

When the regular order of business was resumed, the minutes of the previous meeting were read and approved.

The membership committee reported the name of W. H. Elbring of the Elbring Lumber Company for membership. He was unanimously elected.

The traffic committee, through its chairman, Henry A. Boeckeler, reported as follows:

Your committee begs to report that on May 6 of this year the Interstate Commerce Commission rendered a decision upholding the 19-cent rate to St. Louis on yellow pine from points west of the Mississippi.

The advance on hardwood rates to St. Louis and other points announced by the railroads to take effect Dec. 1, was suspended by the Interstate Commerce Commission until April 1, 1913. Your committee was represented at the meeting here with the railroads, when it explained to them that the lumbermen of St. Louis would not oppose this advance, provided the railroads would use their endeavors to restore St. Louis to the old rate basis. After this meeting adjourned it appeared that the hardwood men held a meeting, at which they decided to protest against the advance, and as they all worked together, the Interstate Commerce Commission granted their request and ordered suspension of the rates.

Acknowledgment is due to P. W. Coyle, traffic commissioner of the Business Men's League, for his getting together the chief railroad officials of the Frisco, Missouri Pacific, Cotton Belt and M., K. & T. Railroads, and ably explaining to them what St. Louis desired.

Your committee took up with the M., K. & T. Railroad the question of switching absorption on inbound lumber, and is pleased to report that this road will now absorb connecting line switching not to exceed one cent cwt. in order to make delivery to industries or public trucks on connecting lines. In addition to that switching, the switching charges of the intermediate lines will be absorbed when the M., K. & T. does not directly connect with the delivering line. This is according to Supplement No. 5, M., K. & T. Switching and Terminal Tariff 4280-B, effective Dec. 18, 1912.

The reports of the retiring secretary and treasurer, John B. Kessler and E. C. Robinson, respectively, were submitted and approved.

The treasurer reported that the club was in a good financial shape and that there was a nice little balance in the treasury.

The secretary's report gave the doings of the club during the year.

The election of officers for the ensuing year resulted as follows:

PRESIDENT—Thos. C. Whitmarsh of the W. T. Ferguson Lumber Company.

FIRST VICE-PRESIDENT—R. B. McConnell of the Huttig Sash and Door Company.

SECOND VICE-PRESIDENT—S. J. Gavin of the S. J. Gavin Lumber Company.

TREASURER—E. C. Robinson of the E. C. Robinson Lumber Company.

SECRETARY—John B. Kessler.

The two latter officers were re-elected.

After the result of the election had been announced, President H. G. Rolfe named Thos. W. Frye to escort President Whitmarsh to the chair.

President Whitmarsh, in assuming the chair said that he was sorry that more hardwood men were not present at the meeting; that he wanted the retailers, yellow pine as well as hardwood, to bury the hatchet and if the hardwood people had any grievance against him, to forget it, as he had always acted aboveboard in any opposition that he had made and they always knew where he stood on every question and that he never fought them underhanded in any manner.

R. W. McConnell, first vice-president, S. J. Gavin, second vice-president, E. C. Robinson, treasurer and John B. Kessler, secretary, in turn thanked the members for electing them to their respective offices.

After a rising vote of thanks had been given to all the retiring officers for their services during the year and to the chairman of the entertainment committee, James E. Gatewood, in particular, the meeting adjourned.

Death of Prominent Industrial Leader

In the death of George Burnham, Sr., father of George Burnham, Jr., of the Baldwin Locomotive Works, and long time the financial head of these works, the largest industrial plant in Philadelphia, and the largest locomotive builders in the world, which occurred on Dec. 10, ends an exceptionally long and useful life. He was ninety-five years old.

From Springfield, Mass., where he was born in 1817, he came to Philadelphia a youth of fifteen, and served as a clerk in a grocery store until he met Mathias W. Baldwin, the builder of "Old Ironsides," the first locomotive built here, and so crude in construction as to be equal to running to Germantown, about eight miles from the city and back only in fair weather. He was employed by Mr. Baldwin to keep the books, attend to the correspondence and pay the mechanics. In 1835 he became the right hand of Mr. Baldwin, who had steadily gone on perfecting the locomotive until five locomotives, considered a wonderful achievement at that time, had been placed on three railroads. One was put on the Germantown railroad, three on the Philadelphia and Columbia Railroad, the predecessor of the Pennsylvania Railroad, and one on the Philadelphia and Trenton Railroad. Mr. Baldwin soon became known all over the country as a successful locomotive builder. Money was not plentiful as soon as it became necessary to extend the works, and workmen of the right kind were hard to get. Mr. Burnham was expected to supply both. One day he told Mr. Baldwin there was no money in the safe to pay the mechanics. "Go get it! Go get it!" was all the satisfaction he got. Well, he got it, and always did get it—he was a skillful financier. Of incalculable help and relief to Mr. Baldwin in this part of the business, Mr. Baldwin could devote all his time to building better locomotives until by 1837 he was turning out twenty a year. He built the first eight-wheeled locomotive, which has served as the standard type for engines in America. Larger accommodations were taken for conducting the business, which soon grew inadequate, and to the building on Broad street extensions were made until the acreage of the works in Philadelphia at the present time amounts to seventeen, and the new works at Eddystone, near Chester, Pa., has an area of eighteen acres.

The panic of 1837 plunged the works into difficulties, but the financial genius of Mr. Burnham saved it. Mr. Baldwin died in 1866, and in 1873 the firm style became Burnham, Parry, Williams & Co. Mr. Burnham was now more than ever (if possible) the financial head, and in many a crisis it was his skill in this direction that carried the business safely through. He was something of an inventor, too; when he was comparatively a young man he contrived a diving machine which stood the test in the Delaware river; other attempts in this direction were eminently successful. It was the custom to test the locomotives before leaving the works by building a fire in their fire boxes. In the case of one or two locomotives a year this primitive method worked very well, but when there were more and more to test, the smoke from the furnaces filled the works and the smoke stacks erected to carry it off would have to be too many to be endured. "Why not pipe the steam from our stationary engine?" says Mr. Burnham. The suggestion was immediately followed and there was no more trouble with smoke, the problem was solved and from that time the Burnham method of testing locomotives was adopted.

Mr. Burnham leaves three children: George Burnham, Jr., of the Baldwin Locomotive Works; William Burnham, president of the Standard Steel Company, and Miss Mary Burnham, a member of the vice commission and a well-known philanthropist.

Eastern Retail Suit Begun

Arguments in the case of the government against the Eastern States Retail Lumber Dealers' Association began December 17 in the United States court in the federal building. Assistant District Attorney Clark McKercher was heard on behalf of the government, and for the defendant associations A. B. Cruikshank of Atwater & Cruikshank. This case against the Eastern States Retail Lumber Dealers' Association, which includes in its membership the New Jersey Lumbermen's Protective Association, the Retail Lumber Dealers' Association of Philadelphia, the New York Lumber Trade Association, the Lumber Dealers' Association of Connecticut, the Building Material Men's Association of Westchester County (New York), the Massachusetts Retail Lumber Dealers' Association, the Retail Lumbermen's Association of Baltimore and the Lumber Dealers' Association of the State of Rhode Island, was the first of a chain of suits brought against organizations in the lumber trade for alleged violation of the Sherman anti-trust law, and in it the government seeks to restrain the affiliated organizations from circulating the so-called black list and other information of interest and value to their members. The petition was filed in the spring of 1911, since which time testimony has been taken before an examiner. This suit has held the attention of the entire lumber trade of the country and the decision is awaited with interest.

Death of F. W. Gilchrist

In the death of Frank William Gilchrist of Alpena, Mich., on the morning of Dec. 13, the lumber trade lost one of its oldest and most highly respected members. Mr. Gilchrist died after a short illness, which he had felt only since the fourth of the month. The disease was diagnosed as uræmic poisoning.

Mr. Gilchrist had long been associated with the lumber trade, and his father before him was a lumberman. The deceased was born at Concord, N. H., Feb. 9, 1845. He came to Michigan in 1850 with his father, Albert Gilchrist, who had been in the lumber business in New Hampshire before that date. His father took up his residence at Marine City, Mich., where he engaged in lumber manufacturing for several years.

The recently deceased obtained his public schooling at that place and upon graduation took a two years' college course at Oberlin, O. It was natural that in connection with his father's business he would get considerable training in the lumber business, and equally natural that upon his breaking off from his scholastic training he should go into that line of endeavor for himself. This he did in 1867, at which date he moved to Alpena, Mich., and started in on his own account. One of his earliest activities was his interest in lake transportation of lumber. His early efforts in that line broadened out so that at his death he was widely interested in lake carrying concerns.

The sawmill at Alpena has been operating continuously since its erection in 1867, and until the latter part of the present year, at which time it was shut down permanently as its entire source of timber supply was exhausted. Mr. Gilchrist's lumber and timber interests have greatly expanded and at the time of his death he was interested in concerns in a dozen different sections of the country. Among these was the Gilchrist-Fordney Lumber Company, Laurel, Miss.; the Rust-Owen Lumber Company, Drummond, Wis., and the Three States Lumber Company of Memphis, Tenn.

Mr. Gilchrist married Miss Mary Rust in 1868. Miss Rust was a daughter of A. Rust, who was one of the pioneers in the lumber business in the Saginaw valley. The deceased leaves, besides his widow, three sons and a daughter. They are Frank R., William A., Ralph P. and Miss Grace Gilchrist. William A. is now managing the Three States Lumber Company.

The funeral and interment took place at Detroit on Dec. 16.

Mr. Gilchrist's passing away means a sincere bereavement to a great many men actively connected with the lumber business. His friends among the old line of lumbermen were many. He was a man to inspire lasting friendships and deep respect among those who were not favored with an intimate acquaintance. He was a man who did much for the public interest and took an active part in many things working toward the betterment of his state and city.

Meeting St. Louis Lumbermen's Exchange

The Lumbermen's Exchange of St. Louis held its annual meeting and dinner at the Missouri Athletic Club, Tuesday evening, Dec. 17.

Several changes in the constitution were made, among them being one increasing the dues of the exchange on a sliding scale, which will place it on a better financial footing and will make it self-supporting, independent of inspection fees. During the past year, owing to various changes, the inspection fees fell off greatly, necessitating a special assessment on the members in order to pay operating expenses.

President Thos. E. Powe gave his annual address in which he reviewed the year's progress of the exchange. He told of the work being done toward strengthening the inspection certificates by appointing a committee on re-inspection, composed of three representative members. The by-laws were changed to cover this move and it has proven an excellent one. In order to induce new membership to the exchange, an additional fee of ten cents a thousand to non-members was added to inspection charges.

The floods and difficulty in getting a competent inspector materially reduced the amount of lumber inspected during 1912. In 1911 there were 7,400,000 feet inspected. President Powe strongly supported the inspection bureau and equally emphatically urged its continuance and growth.

The committee on public affairs appointed by President Powe early in the year made a strong effort to induce woodworking and other plants to locate at St. Louis, but without much avail.

The president further told of the monthly noonday meetings which had been held during the year, and said that they had proven an excellent means of getting together for mutual discussion. He reported a slight increase in membership during the year.

President Powe told of the efforts of the exchange to secure a larger representation of St. Louisans on the board of the National Hardwood Lumber Association. These efforts were not successful at the last meeting. The exchange was successful in getting members on important committees, however.

In closing, President Powe thanked the members for their support and co-operation.

The report of the traffic committee stated that the strong efforts of the committee to abolish the advanced rates from the Southwest to St. Louis, which became effective Jan. 5, 1911, finally resulted in an adverse decision by the Interstate Commerce Commission. The report expressed the belief that the reason for this failure was the problem of putting the Cotton Belt route in position to haul lumber into St. Louis via East St. Louis with no less rate than to East St. Louis. The report also regretted that its protest against the rate advance of one cent to St. Louis from southeastern points was ineffective. St. Louis is not unduly affected inasmuch as competitive gateways had to take the same advance.

The committee was successful in having suspended the advance from one cent to three cents against certain southwestern points, to St. Louis, Cairo, Memphis and all junction points. This rate was to have become effective Dec. 1, 1912, and is suspended by the Interstate Commerce Commission to April 1, 1913.

The report outlined what has been done, and what is necessary to do further in opposition

to proposed advances on rate to Canadian points via Ohio river crossings.

The committee suggested that inasmuch as the rate work is of extreme importance and demands more time and effort than a busy business man can give, it seemed advisable that the exchange secure the services of a competent traffic man to give his entire time to the work.

The committee also recommended that the St. Louis Lumber Exchange work in connection as far as possible with the Lumbermen's Traffic Bureau of Memphis.

Nominations were then made for officers to serve during the coming year. Two tickets were named, one by a committee appointed by the president and the other by a committee named from the floor. The candidates named for president were W. W. Milne and F. H. Smith.

The election will be held at the offices of the exchange on Jan. 5.

The Rate Hearing at St. Louis

The hearing of the proposed advanced tariff on hardwood lumber and yellow pine lumber from southern points to the Mississippi river gateway and Canada and including Cairo and East St. Louis, was heard by United States Commissioner B. H. Meyer of the Interstate Commerce Commission, at the Planters hotel, Monday and Tuesday, Dec. 16 and 17. Further hearing was postponed until Jan. 24, in Cincinnati.

A notice of the proposed increase in the tariff was filed with the commission a month ago. The lumbermen protested and the proposed rate was ordered suspended until Apr. 1, 1913, pending the result of the investigation by the Interstate Commerce Commission.

The lumbermen say that the added charges, if sustained by the commission, will cause an increase in the cost of hardwood in St. Louis alone of from \$7,000,000 to \$10,000,000 each year, as the lumbermen will be forced to recover the increase by raising the prices on their products.

This will eventually come home to the consumer, adding somewhat more to the high cost of living. Including the lumber shipped to St. Louis to be dried, graded and reshipped, it means a total increase in the freight bills of St. Louis merchants of from \$15,000,000 to \$25,000,000.

Under ordinary conditions the lumbermen say that they will grant everything commensurate with their interests to the railroads, realizing that without the conveyors they are practically helpless, but they feel that the new rate is altogether too high.

No substantial advances in the tariffs on other articles have been made and the St. Louis dealers consider that the railroads are showing unjust discrimination against them, especially as the hardwood trade lasts throughout the year, and can be carried by any sort of an equipment.

In January, 1911, the railroads got permission to advance the rates on lumber to St. Louis alone, giving the other competing centers a tremendous advantage over this city, say the local dealers, and in their opinion the proposed new advancement is merely another blow at the St. Louis lumber yards.

The southern lumbermen consider that the granting of the new rates will mean a death blow to many of them, as it will ruin their trade in the marketing of low-grade lumber, which constitutes a majority of the business of most of them.

The time of the hearing on the first day, was taken up with testimony from railroad officials. Their testimony was of a technical nature. They testified, in substance, that the proposed advance would not increase the revenue of the Canadian roads, as several reductions are made in the new schedule as well as advances. The testimony on Tuesday was largely a repetition of that of Monday, at which the railroads contended that the proposed advance in lumber rates would not injure the lumber interests, who could add the additional cost of transportation to the price to the consumer.

In the afternoon on Tuesday the lumbermen began giving their evidence, the railroads having closed their case early in the afternoon.

James E. Stark of Memphis, Tenn., was the first witness for the objectors. His company, he testified, handled almost 2,000 carloads of lumber a year, of which about 150 are sent to Canadian points. He expressed the opinion the proposed rates would work a great injury to the hardwood dealers of the South by enabling dealers in Idaho to place fir lumber on the market cheaper than the southern dealers could.

National Inspection for November

President Charles H. Barnaby of the National Hardwood Lumber Association has issued a statement of inspections by the inspection bureau of that organization for November, 1912. This statement shows that there was a total of 17,180,640 feet inspected under the bonded certificate during the month. Car shortage seriously affected the work of many inspectors, but in spite of this the figures show an increase of 4,510,243 feet over November, 1911.

Fourteen new applications for membership were reported since November 14, which brings the total of new members admitted since the June convention to sixty-five.

The executive committee, as reported in a previous letter from the association, decided to call a meeting of the inspection rules committee in Chicago. A call has been sent out to all members of that committee to meet at the Hotel Sherman, Chicago, Jan. 13, 14 and 15. Chairman J. M. Pritchard requests that all members having any suggestions for changes or additions to present rules submit their ideas in writing prior to Jan. 13, in order that the inspection rules committee may be given ample time to consider all recommendations before drafting its final report.

President Barnaby's letter says that there have been fewer complaints during recent months on account of the inspection department than ever before.

Improvements at Nashville Flooring Plant

The Nashville Hardwood Flooring Company at Nashville, Tenn., has just completed extensive improvements at its Nashville plant, involving the construction of two large Standard dry-kilns at a cost of \$8,500. Orders have also been placed with the Berlin Machine Works of Beloit, Wis., for additional moulders, which will double the output of the interior moulding plant.

The Nashville Hardwood Flooring Company is controlled by John B. Ransom & Co. of Nashville. It manufactures the famous "Acorn" brand of hardwood flooring, which has gained a wide reputation throughout the country.

Bulletin on Chestnut Blight

The Pennsylvania Chestnut Tree Blight Commission has just issued for the information of the public, Bulletin No. 1, a brief, illustrated publication giving the means of identifying the chestnut blight disease and suggesting remedies for its control and eradication.

The interesting document points out the great danger of extermination that menaces Pennsylvania's vast chestnut resources, and urges a prompt and vigorous co-operation generally in the effort in progress to stamp out this new, but terribly destructive pest of our native chestnut trees.

The disease has already entailed losses to timber owners in Pennsylvania amounting to fully ten millions of dollars, having been especially virulent in southeastern Pennsylvania, where thousands of both old and young chestnut trees were killed by the blight. West of the Allegheny mountains, a concentrated effort on the part of the employees of the commission and with the co-operation of timber owners and others, the blight will practically be wiped out by the close of the year, thus giving the assurance that a large portion of Pennsylvania's many millions of dollars' worth of chestnut may be

saved, and the disease checked before it can spread into the valuable timber of adjacent states.

The bulletin describes many phases of the blight, and the warfare that is being waged to control the outbreak. It defines very clearly that contrary to the erroneous opinion advanced by one or two writers, the blight is of a parasitic form, and the trees are not killed by any insects, as has been stated. The fungus is spread, however, by the wind, animals, birds, insects, etc., and when trees are infected, it soon girdles the twigs, branches and trunks, thus causing their death, since the supply of sap beyond the girdled part is thus effectually cut off.

At this season of the year, when chestnut trees are found with branches bearing dry leaves and immature burrs, cankers, orange-colored pustules, etc., it is an indication that the tree is seriously diseased, and the facts should be reported to the Commission and the owner.

Every county in the Commonwealth is under surveillance, and the wisdom of the law creating the commission has been fully demonstrated by the recent favorable developments in various sections of the state where serious outbreaks were promptly averted.

The bulletin also refers to the economic and profitable utilization of trees killed by the blight. The commission acquired much valuable information upon the subject, and can therefore prove of genuine service to those seeking markets for commercial products of the chestnut. The Pennsylvania Railroad Company also conceded special low rates on blighted chestnut cord-wood consigned to tannic acid factories, in order to aid timber owners to find a ready market for such products.

Chestnut nursery stock can only be sold and shipped after it has been carefully inspected by the agents of the commission and properly tagged. A tree that does not appear to be entirely free from the disease is condemned and burned. Nurserymen, generally, are in sympathy with this action of the commission, having no desire whatever to aid in the dissemination of the disease.

It is a source of satisfaction to learn that thus far the blight has confined its ravages to the chestnut tree exclusively.

Copies of the bulletin are available and will be sent without charge upon request, by writing to the commission, at No. 1112 Morris building, Philadelphia.

Buffalo Lumbermen at Head of Distinguished Function

For a year Orson E. Yeager of Buffalo has held the office of president of the Buffalo Chamber of Commerce, which organization has done marvelous work in boosting the Bison City. During the administration of Mr. Yeager many new ideas have been suggested and carried out, and his administration has resulted in a vast amount of good to the business of the city.

On the evening of Dec. 14 this body held its annual banquet at the Hotel Statler, Buffalo. The banquet was a brilliant affair, attended by practically every important business man of the city. The gallery was filled with a brilliant array of feminine beauty embodied in the wives of many of the members.

President Yeager presided and gave a forceful talk, outlining what the chamber has been trying to do, and entering the plea to the young men of the city to draw up into the positions which will gradually be vacated by the older element.

Another lumberman, James B. Wall, who is actively identified with this body, was one of the banquet committee.

Market Report Hardwood Manufacturers' Association

From the executive offices of the Hardwood Manufacturers' Association of the United States at Cincinnati there has just been issued the market analysis for the month of November. The association is developing this market condition

report to a state of high efficiency through the use of the facilities that it possesses to secure confidential information from its membership.

This market publication is intended as a guide to the member, whether he is a producer, wholesaler or consumer, by furnishing a comprehensive and at the same time an accurate analysis of market conditions of recent sales for the various hardwoods.

The method used in compiling this report is interesting. The membership of the association is divided into seven classes, according to the woods they handle, as follows:

Class No. 1. Oak, Oak Construction and Car Material.

Class No. 2. Poplar Planing Mill Operator.

Class No. 3. Poplar, Chestnut, Basswood and Buckeye.

Class No. 4. Gum and Cottonwood, rough and dressed.

Class No. 5. Ash, Cherry, Walnut, Hickory, Rternut, Beech, Birch, Maple, Elm and Sycamore.

Class No. 6. Chair, Furniture and Vehicle Dimension.

Class No. 7. Mahogany.

On the first of each month report blanks are mailed to the membership. Each class has a separate report sheet. The member inserts the prices he has been receiving during the preceding month for the various grades of hardwoods enumerated, together with such comments as may come to his mind.

This information is then compiled at the association's office. All the reports on each grade of wood are assembled, and as there are about three hundred on most of them, this gives a comprehensive idea of just what the market is for each particular wood. The highest and lowest prices are used for the range of the market, as well as the average price determined. All the prices submitted are then carefully studied for the analysis of the market, which is reached by taking into consideration the volume of business and other general conditions surrounding the market.

The reports also take into consideration demand, car supply, thicknesses, etc., with the result that they are an indispensable feature in the hands of the millman in the back woods, whose only outlook over the market for his product is his selling correspondence and maybe the daily newspapers, as well as such stray information as may drift his way occasionally.

Faust Lumber Company Organizes at Antigo

The Faust Lumber Company recently completed its organization at Antigo, Wis., the company being capitalized at \$100,000. Casper Faust is president and treasurer, James H. Worden, vice-president, and Edward Faust, secretary.

The new company will operate the mill erected by the Antigo Lumber Company two years ago. The entire holdings of the former Antigo Lumber Company have been taken up by the Faust company. In addition, it owns considerable land in Langlade, Forest and Vilas counties. It is expected that the first year's run will be in the neighborhood of 8,000,000 feet. Part of its timber will come from the neighborhood of Pelican and about 2,000,000 feet will be shipped from the vicinity of Bowler. It is not expected the company will do any logging on its own lands this year, as it has arranged for a considerable supply of logs, those already contracted for being sufficient to carry it for five months.

Some changes will be made in the mill which will facilitate the handling of logs and lumber. A 650 foot side-track along the east side of the mill pond will be constructed. This will facilitate the handling of logs and enable the company to have more cars switched in each day. It will also eliminate the old expensive and dangerous method of unloading from the railroad bridge into the creek.

The company will start log shipments some time in January and will start the mill up as soon as enough surplus stock is on hand to insure the continuous operation of the mill.

Forked Deer Lumber Company Organized in Tennessee

The notice was published in the last issue of HARDWOOD RECORD to the effect that the Tennessee Hardwood Lumber Company of Nashville had purchased the holdings of John Rose of Jackson, Tenn., for \$35,000 and would operate his plant at Jackson in connection with the Tennessee Hardwood Lumber Company.

This information was correct as far as it went, but did not cover the fact that the new move involves the incorporation of a new concern called the Forked Deer Lumber Company. This concern is capitalized at \$35,000, paid in. Its incorporators are T. B. Johnson, H. A. Batchelor, G. W. Killbrew, and H. C. Merritt, Jr., of Nashville, and T. J. Bailey of Jackson. The company's purchase involves the big band mill at Jackson and considerable hardwood stumpage near that city. This tract consists of a fine stand mainly of white oak and red gum.

Additional machinery will be added to the plant and everything done to make it complete and efficient. The company owns enough hardwoods to afford a cut of several years. Operations will be begun in the near future.

T. B. Johnson is president of the company and H. A. Batchelor is secretary and treasurer. The new concern is affiliated through mutual stockholders with the Tennessee Hardwood Lumber Company and the Tennessee Oak Flooring Company, both of Nashville, but will market its output entirely through its Jackson offices.

The Outlook in Germany

An esteemed English contemporary published the following commentary on 1913 prospects in Germany in wood goods:

From a well-informed German source we have received information which points to the existence in that country of almost analogous conditions to those prevailing over here as regards the problem which high prices are exerting upon the consumption of wood goods. In the consuming markets of Germany, the manufacturing industries, we learn, are still able to withstand the burden of enhanced wood values, as these enterprises are enjoying a full share of worldwide good trade. As in this country, however, it is the German house-building industry which can least afford to be saddled with the ever increasing cost of building materials. It is curious to note that questions which are detrimentally affecting the building trade in this country have their counterpart in Germany. Taxation has been augmented and new impositions put upon land, whilst restrictions are now in course of promulgation as to the height of dwellings. So onerous are these difficulties that, according to our correspondent, "the game is no longer worth the candle, and it has been left to the shady elements of the building trade to carry on." Property mortgages in Germany, since the American crisis a few years back, have lost popularity, and are not now so easily obtainable as they formerly were; added to which the high bank rate affords little inducement to building operations. An unfortunate sign of the times is that in several of the most active centers of the coal and iron industries the building trade is passing through a crisis and failures are becoming the order of the day. Next summer, we gather, an agreement now existing between the master builders and various trade unions expires, when the alternative of higher wages or a disastrous strike will probably have to be faced. Although a redeeming feature of present trade is that German municipalities are yearly adding to their public buildings, our correspondent thinks there is little reason to take an optimistic view of the German market as far as consumption is concerned.

New Car Stakes Recommended in Wisconsin

Members of the Wisconsin Industrial Commission held an informal hearing on the sixteenth to discuss the question of adopting safety car

stakes for logging cars. No permanent order has been issued and none is likely to be until the commission holds more meetings, but eventually Wisconsin shippers of logs will undoubtedly be compelled to use the safety car stakes recommended. The stakes make it possible to release the logs from the car without the use of men to be unladen. These stakes are a recent invention.

The cause of the hearing was an investigation by the commission which determined that the cause of most of the injuries received in unloading logging cars is the failure of the men to be able to release the stakes without putting the workmen in an extremely dangerous position.

Hardwoods in Liverpool

Reports from leading importing firms in Liverpool indicate a very healthy condition regarding most kinds and grades of American and other hardwoods. The mahogany situation is particularly good. A statement on recent mahogany sales by one fancy wood house in Liverpool says there was a large attendance and that the American demand was very heavy. The entire list was cleared out, and while prices on the first sale were very much as the preceding month, on the second sale they were materially higher. This concern has forecasted unusual demand at this time and its forecasts have been more than fulfilled. It again points out that during the next nine or ten months the longer buyers wait before placing orders the worse they will fare. The earnest advice of this concern is to buy now and save money.

No change is reported on conditions with ash lumber. The arrivals of ash logs have been moderate and good stock of fair size meets with ready sale at satisfactory prices. There is an active demand for good quality walnut logs of good size.

The arrivals of black walnut lumber have been light, and their value is steadily improving. It is reported that the demand for hickory logs is active and that early shipments should meet with ready sale with good prices.

Prime oak logs of good lengths are in active demand. Quartered oak lumber continues to be asked for, but buyers and shippers can not get together on the question of value. Firm values prevail for plain stock, the arrivals having been light. There has been considerably more demand for prime oak cabinet planks, but inferior quality stock of poor dimensions has not been selling actively. Oak coffin planks of good specifications are in good demand. The same is true of oak wagon plank. The arrivals of this stock have been but moderate.

Good size, sound, clean poplar logs are meeting with considerable call, although inferior stock finds little sale. The arrivals of poplar lumber have been light, but high prices being asked are preventing business. No change is reported in the red gum lumber market.

Receiver Appointed for Harding-Finley Lumber Company

Judge Thompson, in the United States district court, on Dec. 14, appointed Frederick S. Underhill of Wistar, Underhill & Nixon, receiver for the Harding-Finley Lumber Company, Philadelphia, Pa. Bond was fixed at \$100,000.

Action was taken on a bill in equity filed by Dougherty, McKay & Co., J. S. Moore & Co., and E. H. Morrow, creditors and stockholders of the concern. The complainants averred that the company was unable to meet maturing obligations and that, if the assets were properly conserved under a court receivership, enough will be realized to meet the indebtedness. The outstanding liabilities are estimated at \$160,000, and the assets \$200,000. The company, through its president, W. J. Harding, filed an answer admitting the averments of the bill and joined in the application for the receiver. Judgments were entered against the concern on Dec. 14 for \$499.17, favor K. B. Johnson; Dec. 16, \$2,285.21, favor Miami Valley National Bank.

Sister of Well Known Manufacturer Becomes Bride

A wedding of exceptional interest to the lumber trade by reason of the fact that the groom is an officer in one of the leading hardwood corporations in Baltimore, while the bride is a sister of the president of the company, took place on Dec. 11, when Miss Olive W. Wood became the wife of James Harlow Yost, secretary and treasurer of the R. E. Wood Lumber Company of that city. R. E. Wood, president of the company, and brother of the bride, gave her away, and G. L. Wood and Clarence E. Wood, general manager and assistant general manager respectively, acted as ushers. L. Y. Warren of Atlanta, Ga., was best man and Rev. John William Smith performed the ceremony at the house of R. E. Wood, 1729 Park avenue, where both of the young people have been making their home. The bride wore a handsome gown of white charmeuse, trimmed with flandre point lace. Among her jewels was a beautiful heart of pearls, a gift of the groom. She carried a bouquet of lilies of the valley. Miss M. Agnes Powers was maid of honor and little Kathleen Powers served as ring-bearer. Mr. and Mrs. Yost received many presents and were overwhelmed with congratulations. They are spending the next two weeks in New York, and will be at home after the holidays at 1729 Park avenue.

Log Conditions in England

To a person familiar with logging conditions and methods in this country, conditions which prevail abroad must necessarily seem somewhat peculiar, to say the least. A short story on the coming winter fall of timber as published in the British Timber News, outlines conditions which prevail among the timber buyers taking up native trees in England. This article states that there is generally an amount of home grown timber freshly felled on the market, but very little that has been stored for a couple of years and is in good condition for sawing into boards. A few timber merchants have a supply of dry oak, ash, and elm suitable for wheel making and cartwrights; but dry home grown timber, either in the round or in planks is hard to get. Even on large estates the same holds good and a great majority of the home timber is converted in the green state or when only a few months felled. The article comments that it is not to be supposed that home grown timber will ever take the place of that from abroad for house building and other constructive purposes, for the reason that it is of inferior quality, much rougher, and rarely gotten out in the size and scantling required. It nevertheless deplores the fact that little is done in the matter of seasoning logs of specific size and quality for sawing into planks and boarding as required.

The significance of this article can only be appreciated after one considers that the conditions outlined are similar to those which would prevail if sawmills and manufacturers of lumber in this country relied entirely for their log supply upon the scattered cuttings made by farmers on their woodlots and by individuals owning private estates. It is an ominous fact, however, that undoubtedly at one time the tree growth in the section referred to in the article was prolific. We should not lose sight of the fact that in this country where the prodigality of our timber supply has made us rather extravagant in our utilization of it, there is a possibility of the forests eventually attaining the same condition as is outlined by our British contemporary.

Fire Underwriting Alliance Bulletin

The December bulletin, No. 60, of the Lumbermen's Underwriting Alliance, U. S. Epperson & Co., attorney and manager, Kansas City, Mo., recently came from the press. The only fire reported for November occurred at Graysonia,

Ark., where the feed warehouse of the Graysonia-Nashville Lumber Company was destroyed. There was an attendant loss of \$3,000. This makes a total loss to date of about \$106,000.

General mill cleaning, which is so difficult under ordinary circumstances, can be affected with the holiday shutdown, and the bulletin recommends that while the opportunity presents, all parts not accessible while the mill is running be whitewashed, and all oil and grease be scraped and scrubbed from wood surfaces and the surfaces then painted.

The general labor shortage throughout the fall has resulted in the postponement of necessary improvements until the mills close down at Christmas. If the promised attention is given these betterments and a thorough clean-up is made, it is likely that the low loss ratio will be maintained even through the windy spring period.

The bulletin warns members of the Alliance not to put off too long the boxing and packing of hydrants, and the use of brine in the water barrels to prevent freezing.

It is pointed out that the low loss ratio for 1912, which is one-third less than that of last year, does not mean that there have been proportionately fewer fires. Fifty loss claims varying from \$6 to \$20,000 have been paid. The distinguishing feature of this year's fires was their quick control. In only six cases did the damage exceed \$5,000. Nearly all the fires occurred while the plants were in charge of the night watchmen, and in a few cases night crews were also on duty. The handling of nearly fifty night fires with so small an aggregate loss at plants where the constructive material is highly combustible and the operation attended with considerable inherent hazard, is the strongest possible proof of the value of efficient watch and water service.

The bulletin pays a marked tribute to the efficiency of night watchmen in general. Employers of watchmen, however, are warned not to relax for a moment in a rigid adherence to the rule that stations must not be skipped. No work connected with the entire operation can be so important as that of the watchman if a fire comes, and it is not good policy to "chance it" for a single night that it will not come.

The bulletin contains mostly suggestions as to efficient watch service and the main theme is that the watchmen should be able-bodied, intelligent and well-trained, and should be equipped with every assistance to enable them to extinguish incipient fires.

Cut and Shipments in November, 1912 and 1911

The following comparison of cut and shipments by the same 56 firms in November, 1912, compared with November, 1911, is compiled from the Northern Hemlock and Hardwood Manufacturers' Association's records:

	Cut, M feet 1912.	1911.	Shipped, M feet 1912.	1911.
Hemlock	18,190	14,167	32,555	29,892
Ash	231	136	957	1,088
Basswood	1,907	1,276	5,563	4,972
Birch	2,878	1,689	8,390	6,392
Elm	732	358	2,837	1,967
Maple	4,096	3,045	6,503	3,829
Oak	42	29	155	179
Mixed	250	421	2,202	2,179
All hardwoods	10,136	6,954	26,607	20,606
Total	28,326	21,121	59,162	50,498
Increase in hemlock cut, 28 per cent.				
Increase in hemlock shipments, 9 per cent.				
Increase in hardwood cut, 46 per cent.				
Increase in hardwood shipments, 29 per cent.				
Increase in total cut, 34 per cent.				
Increase in total shipments, 17 per cent.				

Woods Used for Piling in Foreign Countries

Daily consular and trade report for Dec. 7 gives an interesting account of piling methods and materials abroad. Conditions are outlined and the species used are enumerated for the various countries.

In Cuba, it is shown, several woods are used,

including various American species and mahogany. Native hardwoods are used to a limited extent. Where these hardwoods are utilized they receive no preservative treatment whatever in the matter of impregnating materials although a method of treatment somewhat in vogue is to give them a coating of concrete.

At Martinique a native wood is used for piling, called poirier. This is very hard and seems immune to the attacks of marine borers. It has a life in the water of from ten to twenty years. Water seems to have a preservative effect on this particular timber. It is also used for railway ties because of its durability. This wood has the appearance of being soft and coarse grained, but is said to be nearly as hard as mahogany.

The Trinidad wood piles are used, mainly of greenheart. This is a durable hardwood and in being used is usually coated with four inches of concrete. In this way the piles are made to last as much as fifty years.

In Austria little wood is used and of the wood species oak has an important position. Other woods are fir, pine and larch.

In France quite a little beech is used for pile purposes. Along the seacoast at maritime ports and all places where the piles come in contact with salt water, teak or Vienna greenheart is used. In all cases the species are employed in the green state. Beech and pine in the natural state last about twenty years although when attacked by borers they may be destroyed much sooner. Teak and greenheart last much longer.

The most important species used for piling in Australia are various species of eucalyptus. Seven species of this genus are used going under the name of dark red iron bark, gray iron bark, red iron bark, red gum, flooded gum, gray box, Jarrah, and callowood.

Drugs and Chemicals from Forest Trees of the United States

An inspection of the "drug and chemical" page of the New York Commercial shows that at least twenty-five of the commodities listed on that page are obtained from trees growing in the United States.

Under "Essential Oils" there are found six which are obtained from various parts of different trees by distillation with steam. Birch oil is obtained by this method from birch bark and twigs; this oil contains the same substance, methyl salicylate, which gives to wintergreen oil its characteristic odor and on this account is often called wintergreen oil and sold as such. Cedar leaf oil and cedar wood oil are obtained, respectively, from the leaves and twigs and from the wood of cedar trees. Both white and red cedar are used indiscriminately, although the oils from the two trees are quite different in composition. The eucalyptus oil, on which the price is quoted, is specified as Australian, but some oil is produced in this country from the eucalyptus trees which have been introduced so successfully into California. Hemlock oil and spruce oil are obtained from the pitchy leaves of these trees.

Canada balsam and Oregon balsam are obtained from the balsam fir and the Douglas spruce, respectively, by cutting or chipping the bark and collecting the sticky liquid which runs out.

Wood alcohol, acetic acid, acetone and acetate of lime are produced from hardwoods directly or indirectly by the process known as destructive distillation. Pyroligneous acid is the name given to a crude liquor obtained during the same process. Gallic and tannic acids are contained in the tanning materials extracted from hemlock bark and from the wood of the tanbark oak.

The barks from the following trees are listed as regular commodities of the drug and chemical trade: cherry, elm, prickly ash, sassafras, white pine, witchhazel and bayberry.

Potash is contained in wood ashes and is extracted by a leaching process. Spirits of turpentine and rosin are the main constituents of the crude turpentine which runs from the "chipped" yellow pine tree. The crude turpentine is distilled with steam and the spirits pass over into the condenser while the rosin remains behind in the still.

Pine tar is obtained from "fat" pine either by charring in a tar kiln or by a process similar to the destructive distillation mentioned above.

This is not a complete list of wood products of chemical interest, but it gives some idea of the variety of useful materials which are obtained from the trees of this country.

A New Species of Oak

A daily paper of Tuscaloosa, Ala., reports that Dr. R. M. Harper, botanist of the state geographical survey, has discovered what he believes to be a new species or at least variety of oak in the southeastern part of Alabama. The tree is found in a peculiar bit of woodland in Pike county, known locally as "the rocosin." The leaves and acorns of the supposed new oak differ from those of any known oak. It is possible that the tree is confined to that particular locality.

Miscellaneous Notes

The Jesse C. Foster Lumber Company has been incorporated at Norfolk, Va., with a capital of \$50,000.

The Beatrice Veneer Works, Beatrice, Ala., will soon commence the erection of an addition to its plant.

The Black Manufacturing Company has been incorporated at \$20,000 to do a general wood-working business.

The Ward Furniture Manufacturing Company of Fort Smith, Ark., has increased its capital stock to \$100,000.

The Evansville Carriage Wood-Stock Company has been organized at Evansville, Ind., with a capital of \$20,000.

The American Veneered Column Company has been incorporated at Brooklyn, N. Y., with a capital of \$10,000.

The Texarkana Lumber Company of Texarkana, Tex., has increased its capital stock from \$10,000 to \$40,000.

The Iron City Lumber Company, Youngstown, O., recently increased its capital stock from \$50,000 to \$100,000.

The woodworking mill of A. Koller & Son, Summerville, Mo., was recently destroyed by fire, with a loss of \$75,000.

The Thompson Hardwood Lumber Company, Cincinnati, O., has increased its capital stock from \$30,000 to \$80,000.

The Sheffer Timber and Lumber Company was incorporated at Kalamazoo, Mich., with a capital stock of \$15,000.

The Franklin & Kennebec Manufacturing Company has been incorporated at Farmington, Me., with a capital of \$10,000.

The Tall Timber Lumber Company has recently been organized at Texarkana, Ark., with an authorized capital of \$250,000.

The Miller-Wells Lumber Company, Cleveland, O., was recently incorporated at \$30,000 to do a general manufacturing and wholesale lumber business.

The Bailey Lumber Company was recently incorporated at Bluefield, W. Va., with a capital stock of \$50,000, to do a general manufacturing business.

The Maryland Timber Company has recently been incorporated at Baltimore, Md., with a capital stock of \$100,000, to do a general manufacturing business.

The woodworking plant of Gilman & Son, Springfield, Vt., which was recently destroyed by fire, was fully covered by insurance and will soon be rebuilt.

The Jackson Manufacturing Company has been incorporated at Rockford, Ill., with a capital stock of \$25,000 for the purpose of manufacturing washing machines.

The plant of the Woodstock Lumber Company

of Woodstock, N. H., was recently destroyed by fire with a loss of \$100,000, covered by insurance. The plant will be rebuilt.

The Porter Lumber Company has been incorporated at Charleston, W. Va., for the purpose of erecting a single band mill to have a daily capacity of 35,000 feet of lumber. The company is capitalized at \$100,000.

The Comrades Manufacturing Company of St. Louis, Mo., has been incorporated with a capital stock of \$100,000 to do a general manufacturing business. The incorporators are E. H. Comrades, J. H. Comrades, Jr., Wm. F. Bauman and others.

The Jones Lumber Company has been organized at Warren, Vt., with a capital of \$10,000, to do a general wholesale and retail business in manufacturing lumber, boards, boxes, butter tubs, flooring, etc. The organizers are O. M. Jones, Jennie L. Jones and Mildred F. Jones.

The Robinson Lumber Company, 717 Whitney-Central building, New Orleans, La., has succeeded the Robinson Lumber, Veneer & Box Company, manufacturer of yellow pine, cypress and hardwood lumber, and which company makes a specialty of cross-ties and piling. The company has mills in Louisiana and Mississippi.

Col. George W. Clark of New Jersey recently sold 2,000 acres of hardwood stumpage on Jonathan Creek in Haywood county, N. C., to O. H. Kerr and S. B. Hayes, comprising the Jonathan Creek Lumber Company. The timber consists of a high quality of oak, birch, maple and chestnut. The company has also purchased from S. Montgomery Smith the sawmill at Sprucemont and the lathe and shingle mills at Bellwood. The mills will be operated as soon as the Jonathan Creek flume extension is completed to the sawmill which is to be located on the timber tract just purchased.



Hardwood News Notes



CHICAGO

HARDWOOD RECORD acknowledges receipt of the following 1913 calendars:

From the Midland Lumber Company, Parkersburg, W. Va., a large practical, plainly printed paper calendar;

From the Simonds Manufacturing Company, saw maker, Fitchburg, Mass., a calendar affixed to a card bearing the photograph of their "Satisfied Old Carpenter;"

From The Johns-Mowbray-Nelson Company, hardwood wholesaler of Cincinnati, a beautiful panel containing a head by Frank H. Besch;

From the Central Veneer Company, Huntington, W. Va., a green Japan veneered card containing a drawing entitled "In the Grampian Hills," by Daniel Sherrin;

From George C. Brown & Co., Proctor, Ark., a large card with calendar affixed on which appears a panel entitled "Nellie Custis' Rosebush," by J. L. G. Ferris;

From The Huddleston-Marsh Lumber Company, Chicago, a plain calendar for practical office use containing letters large enough to be seen across any office.

HARDWOOD RECORD acknowledges receipt of a letter from the Logan-Maphet Lumber Company of Knoxville, Tenn. The style of this concern has been changed to the J. M. Logan Lumber Company. This will be a change in name only, the present officers, directors and stockholders being the same as for the past year.

Arthur Jarvis of the Steven & Jarvis Lumber Company, Eau Claire, Wis., spent Thursday of the past week in Chicago. Mr. Jarvis was in conference with his Chicago representative.

H. E. Christiansen of the General Lumber Company, one of the new wholesale concerns at Milwaukee, was in town for a day last week. Mr. Christiansen was formerly with the Maxson Lumber company of that city.

B. C. Tully and Frank Robertson of the Anderson-Tully Company, Memphis, Tenn., spent a few days last week in this city on business.

J. F. McSweyn, president and general manager of the Memphis Saw Mill Company, Memphis, Tenn., was in town Thursday of last week.

W. E. Vogelsang of the Turtle Lake Lumber Company, Grand Rapids, Mich., spent a few days last week with the local trade.

J. W. Thompson of the J. W. Thompson Hardwood Lumber Company spent the latter part of last week in this city on business.

D. S. Watrous, manager of the Lansing Company, Parkin, Ark., spent a few days last week in Chicago.

F. J. Darke, general sales manager for the J. S. Stearns Lumber Company of Odanah, Wis., was in the city last week.

E. H. Klann, hardwood wholesaler, Fisher building, has changed the style of his concern to the E. H. Klann Lumber Company in anticipation of incorporation. J. L. Anderson of Chicago has been engaged to travel the territory within 150 miles of Chicago. The company will now handle northern hardwoods as well as southern.

A catalogue showing various styles of blocks, sheaves and wire rope as gotten out by the Clyde Iron Works of Duluth, Minn., has just been received in this office. The publication is printed in the same high-class style of all the catalogues and similar literature issued by this company.

Eugene McDonough of the McDonough Manufacturing Company, Eau Claire, Wis., spent a few days in Chicago on a business trip last week.

W. B. Burke, general manager of the Lamb-Fish Lumber Company, Charleston, Miss., was in Chicago last week in conference with Vice-president Lamb of that concern.

W. L. Wheeler of the Bissell-Wheeler Lumber Company, Marshfield, Wis., spent a few days in the city the early part of last week on business.

A. P. Goldsmith, president and treasurer of the Radford-Portsmouth Veneer Company, Radford, Va., attended the meeting at the Auditorium hotel of the National Veneer & Panel Manufacturers' Association held two weeks ago.

Charles Dudley of the Dudley Lumber Company, Memphis, was in town a day or two recently.

O. H. Babcock of the Babcock Lumber Company, Pittsburgh, Pa., spent several days here recently in conference with his local manager, J. H. P. Smith.

NEW YORK

William J. Jones, secretary of the Rowland Lumber Company, headquarters Norfolk, Va., spent a few days in town recently.

The Mexican Hardwoods Company has been incorporated in Manhattan, with a capital of \$1,500,000.

A petition in bankruptcy has been filed against the Column Manufacturing Company, manufacturer of built-up columns, of 206 Broadway, Manhattan. The company was incorporated in September, 1902. The columns were manufactured at South Norwalk, Conn.

Rufus L. Sisson, the head of the A. Sherman Lumber Company, Potsdam, N. Y., was a visitor in New York last week, where he spent most of the time at the local office, 1 Madison avenue. In discussing the condition of business, Mr. Sisson reports the general lumber market satisfactory and believes that 1913 will prove a good

year for lumber traders. The A. Sherman Lumber Company will manufacture about 15,000,000 feet of spruce and hemlock, in addition to which it will have supplies of hardwoods, flooring and sundry lines, which will be handled through the local wholesale department of the business.

A meeting of the board of trustees of the National Wholesale Lumber Dealers' Association was held on Dec. 19 at headquarters, 66 Broadway. The trustees reviewed the work of the year and discussed the plans in connection with the annual meeting to be held soon.

A meeting of the stockholders of the Dunbar Box & Lumber Company was held at the office at 282 Eleventh avenue, recently, to take such action as was necessary in the interest of the company by reason of the death of Thomas T. Reid, its former president. Hugo Reid, A. M. Hirsh, W. H. Gillespie, Fred Mueller and Frank C. Hughson were elected a board of trustees to serve until the next annual meeting. The following officers were also elected: Hugo Reid, president; W. H. Gillespie, vice-president; Fred Mueller, secretary-treasurer.

The Hudson Lumber Company, 152 West Eighty-second street, is the name of a selling company new in the ranks of the local wholesale trade. This company handles hardwoods and cypress lumber, making a specialty of oak, ash and gum. T. W. Hudson is manager in New York.

Among the visitors to New York during the past fortnight were Gen. Francis E. Waters, Surry Lumber Company, Baltimore; M. S. Tremain, Montgomery Brothers Lumber Company, Buffalo; C. L. Robinson of the timber department of the Chicago Lumber & Coal Company, St. Louis; F. C. Rightor, Sparkman Mill & Lumber Company, Little Rock, Ark., and W. M. Weston, W. M. Weston Company, Boston.

The New Jersey Veneer Company has purchased the mill on East Railway avenue, in the Lakeview section of Paterson, N. J., and will overhaul the plant. The company will manufacture high grade doors, panels and veneers for automobiles and other high grade work.

BUFFALO

The annual banquet of the Chamber of Commerce proved an entertaining social event. Addresses were made by O. E. Yeager, the retiring president, and others. The committee in charge of the affair had I. N. Stewart as its chairman and other members were O. E. Yeager, J. B. Wall and A. W. Kreinheder. Fully as interesting a social event was the election and smoker of the Automobile Club of Buffalo, over which organization M. M. Wall will preside as president during the coming year.

The J. E. Dominick furniture factory at Salamanca was badly damaged by fire on Dec. 14, with a loss of about \$15,000; insurance \$2,000. Many men were thrown out of work by the blaze.

George W. Colie of the long established furniture concern of Colie & Son, of this city, died on Dec. 17, aged seventy-two years. He leaves a son and two brothers.

The Interstate Commerce Commission has granted a hearing to the Buffalo lumbermen on Dec. 30 to discuss the reloading privilege on lumber, having points which it wishes to clear up before taking action.

At the recent inspection trip and meeting held by the government engineers here to discuss harbor improvement for Buffalo, the Lumber Exchange was represented by H. F. Taylor, H. I. George, W. P. Betts, M. S. Burns and M. M. Wall. A. J. Elias also took part in the advocacy of local harbor improvement.

A. W. Kreinheder, who has just been elected treasurer of the Automobile Club of Buffalo, will this year retire as director of the Chamber of Commerce, in which, however, he retains an active interest.

J. B. Wall has lately been in the South, looking after the lumber interests of his company, which has been getting a large stock of oak from that direction for some weeks.

Hugh McLean has returned from Haymarket, Va., where he attended the wedding of his nephew, H. J. Gates, a member of the Louisville Point Lumber Company of Louisville, Ky.

The National Lumber Company has completed and is now occupying its new storehouse which will be used especially for maple and other flooring. The company reports business as very good.

Miller, Sturm & Miller's additions to stock since opening the yard early this month have been oak and maple chiefly. Trade is reported to be satisfactory.

Anthony Miller has a large stock of general hardwoods at the inventory season, although trade is stated to have been pretty good during the past month, especially in oak and maple.

I. N. Stewart & Bro. have been filling some orders for mahogany lately, a wood which has not been doing much in this market for some time. They have also sold fair amounts of oak and ash.

O. E. Yeager states that the hardwood trade is improving and that a good quantity of business has been placed for shipment immediately after the taking of inventories.

The office of T. Sullivan & Co. states that there is a larger demand lately for Nos. 2 and 3 common basswood and that low-grade poplar is also in better sale.

H. T. Kerr is doing considerable business in Pennsylvania hardwoods and expects to cut 200,000 feet of cherry next year, besides a liberal amount of soft maple and birch.

PHILADELPHIA

E. M. Bechtel, sales manager for William Whitmer & Sons, Inc., testifies to an all round good business. Mills are all active and shipping out stuff as fast as cars are available.

Frank E. Schofield of Schofield Brothers reports a banner year's trading, and signs potent for a prosperous 1913. The Saltkatchie Lumber Company's mill, Schofield, S. C., is running full capacity, and the Honaker, Va., plant with its three band mills is turning out from 2,500,000 to 3,000,000 feet of lumber a month.

Daniel B. Curll reports a big year's business, and is confident that 1913 will cap the record. His brother, H. M. Curll of Seattle, Wash., where he has interests in the lumber business, is spending the holidays in Philadelphia, and may eventually make this city his home.

The Summit Lumber Company has moved its office from 1019 Real Estate Trust building, this city, to 503 Bennett Block, Wilkesbarre, Pa.

Charles L. Meckley, formerly of the Meckley, Lance Lumber Company, which went out of business recently, has returned to James Strong & Co., with whom he became associated when quite a lad. He joins the selling staff of this house.

Among the recent visitors to the Lumbermen's Exchange rooms were John F. Bertles of Bertles & Bertles, Spokane, Wash., and Edwin W. Adams, Atlantic City, N. J.

P. M. Lachmund, sales manager for the Potlatch Lumber Company, Potlatch, Idaho, while visiting the local trade recently, was the guest of Owen M. Bruner.

J. W. Difenderfer of J. W. Difenderfer Lumber Company, reports satisfactory trading all along the line. He is making a short stay at the mill in east Tennessee.

W. R. Taylor president of the W. R. Taylor Lumber Company, recently returned from North Carolina and Tennessee, where he made a satisfactory deal for about 3,000,000 feet of white pine, hardwoods and hemlock. He reports shipments easier, and anticipates a prolific business for 1913.

Charles F. Kreamer of Kreamer & Co., says good orders are coming in right along and the

outlook is favorable. He reports a decided improvement in the coal region situation.

Thomas B. Rutter, Jr., of Mings & Rutter, speaks philosophically of trade conditions. He says things are keeping up well for this time of the year, and is optimistic as to the near future.

The Fulton-Walker Company, extensive wagon builder, is obliged to seek new quarters on account of contemplated improvements by the Pennsylvania Railroad. It recently purchased the Lengert building, 237 to 245 South Twelfth street, formerly occupied by Michael Lengert, carriage manufacturer.

PITTSBURGH

The De Voss & Adelman Lumber Company has been dissolved and the business will be continued under the name of the Adelman Lumber Company with offices at 311-313 House building. The members are A. and C. H. Adelman.

The A. M. Kinney Lumber Company has bought two more small tracts of maple and oak in Ohio and will cut it off at once. It has three mills now working in the Buckeye state.

The Garling & Spahn Company has moved its offices to suite 1201 House building. The company reports an excellent outlook for lumber next year.

The Germain Company announces that it is passing up some very good business because of a scarcity of cars. Export business is still very dull but the company's officials look for a big improvement in general trade after the first of the year.

President W. D. Johnston of the American Lumber & Manufacturing Company announces that 1912 has shown at least twenty per cent more business on the books of the company than last year. He believes that with the better business conditions prevailing and a more hopeful spirit everywhere, the lumber business will improve right along next year.

The Pittsburgh Lumbermen's Mutual Fire Insurance Company wrote over \$400,000 more direct business this year than in 1911. Through its secretary, Carl Van der Voort, it is cutting out much of the undesirable business that always runs down and the company is making fine headway at present.

The Balsley & Mcracken Company is doing a very nice business in the new First National bank building and bids fair to be one of the real hardwood concerns in this city.

BOSTON

Charles O. Skinner of the C. O. Skinner Company, Boston, died Dec. 10, following an operation which was performed a few weeks before and from which he did not rally. He was forty years old. Mr. Skinner was one of the most popular of the younger men in the lumber trade in Boston and was well known throughout the South and West. The lumber dealers of Boston met on the day of the funeral and passed resolutions on his death. The funeral services were attended by a large delegation of his business associates.

George P. Clark, formerly one of the most active lumber dealers in Boston, died at his home in this city Dec. 9 at the age of eighty years. Death was due to heart failure.

William E. Litchfield, a prominent hardwood lumber dealer, Boston, returned from a western trip a week ago. He visited the mill of Litchfield Brothers at North Vernon, Ind.

Alexander Neeley, a lumber dealer in Mobile, Ala., has been visiting his brother in Boston this month.

The export lumber business from the port of Boston to South America is being resumed after a period of several months dullness. A large amount of plain oak and pine is being loaded for shipment this month.

The S. A. Smith Manufacturing Company, Brattleboro, Vt., has been incorporated with a capital stock of \$150,000. The incorporators are

Frank L. Hunt, A. B. Clapp and F. L. Smith, all of Brattleboro. The company plans to begin the manufacture of toys, woodenware, carriages, etc.

BALTIMORE

Stephen S. Mann and Frank A. Parker of Mann & Parker, which went into the hands of a receiver some months ago, have been discharged from bankruptcy in the United States court here. The assets of the old firm, however, are still in the hands of the trustee, but will be distributed as soon as possible.

It was announced here with much detail that Henry Gassaway Davis, who is one of the pioneers in the development of the resources of West Virginia and has acquired a great fortune from timber, coal, railroads and enterprises, was about to retire from active life, relinquishing the presidency of the Coal & Coke Railroad of West Virginia. But on the occasion of his visit in Baltimore this week, Mr. Davis, who is now eighty-nine years old, denied the report, stating that he had no intention to get out of harness. He ran with Judge Parker on the ticket for Vice-President in 1904, has served in the United States Senate and still takes a keen interest in public affairs.

C. C. English of the Asheville Planing Mill Company, Asheville, N. C., was in Baltimore last week. He came here in search of stocks, having visited other sections. He was especially after chestnut, which he had found unusually scarce. There appeared to be a sufficient supply of poplar, but offerings of chestnut were very limited, he ascertained prices had stiffened appreciably.

George W. Eisenhauer of the Eisenhauer-Maclea Company, who has been ill for some time, continues to improve slowly and is able to make short trips in the open air. He has not yet been at his place of business.

James Baer of Richard P. Baer & Co., has returned from a trip to northern points, his travels having extended as far north as Montreal. He states that a good demand for hardwoods prevailed everywhere and that prices were either firm or higher. Richard P. Baer of the same firm is back from a visit to Mobile, Ala.

The National Lumber Exporters' Association recently adopted resolutions of regret on the death of E. E. Goodlander.

COLUMBUS

L. B. Schneider, sales manager for John R. Gobeys & Co., says the demand for all grades of hardwoods at this time is very good. Prices are well maintained and the volume of business is entirely satisfactory. He says oak is the strongest feature of the market. Both hemlock and chestnut in the sound wormy grade are strong. The yard trade is a little slow, but factories are taking advantage of every opportunity to lay in supplies.

F. B. Pryor of the W. M. Ritter Lumber Company says trade conditions at this time of the year are very satisfactory. He says stocks in hands of dealers are light. Factory trade seems to want to stock up, but the yard trade is a little slow, expecting a drop in prices in the near future. Prices are being well maintained and the volume of business in all of the lower grades is entirely satisfactory.

M. A. Hayward reports a good business for the time of the year. Oak is in good demand, as is also poplar and chestnut, especially the sound wormy. Prices are firm. The car situation is somewhat easier than last week, but there is still room for marked improvement.

W. L. Whitacre of the Whitacre Lumber Company says trade in hardwoods has been exceptionally good considering the time of year. Prices are being well maintained and stocks in the hands of dealers are light. The car situation is a little better than during the past week. The outlook for the future is very bright.

A. C. Davis of the A. C. Davis Lumber Company says the hardwood trade is very satisfactory for the time of the year. Prices are good and show a tendency to remain so.

CINCINNATI

Wreckers have been busy all week tearing down the remaining walls of the famous old Gibson House which was destroyed by fire last week. Wells Brothers of Chicago are assembling material as fast as possible to start to work erecting the new Hotel Gibson, which, when completed, will be of fireproof construction throughout, twelve stories in height and covering one-half acre of ground space. It will have a convention hall on the second floor second to none in the country.

Another big improvement and a very much needed one is the new Union Depot and Terminal Company, which is now an assured fact. It will house all of the railroads entering the city, excepting the Pennsylvania, which will build its own depot in another section of the city later on. Work on the new depot started last week.

The new firm of the Johns-Mowbray-Nelson Company is doing all that was expected of this hustling young but experienced firm. Mr. Johns, just home from a trip, states that business is in a flourishing condition and that the company placed some very heavy business during this month.

C. M. Clark, local manager of the Swann-Day Lumber Company, states that his company is very well satisfied with conditions and that the poplar market seems to be much improved in the upper grades, while the low grades have been going at a premium during the last several months.

Ben Dulweber, the active head of the John Dulweber Company, was seen at his office in the west end, adjoining the company's big hardwood yards. He stated that business has been beyond expectations and that the company is doubling its efforts at its own mill in the South to increase the output. It is also buying desirable hardwoods when offered at reasonable prices. He says that the outlook for next season is very bright.

Fred Mowbray of Mowbray & Robinson was in town this week and spent quite a little time at the office and looking over the yard. He stated that the three big mills of the company at Quicksand and Irvine, Ky., are running to capacity and that they have a comparatively small stock of lumber of any kind on hand, the consumption being quite equal to the output. He sees no reason why conditions should change and looks for a big year in the hardwood field next season.

At the M. B. Farrin Lumber Company's big plant on the outskirts of the city all is activity. Stock on hand here is below the amount usually carried by this big concern, and while stock has been arriving freely during the last week or so, the big hardwood flooring mill is using it up as fast as received. The flooring industry is rapidly growing and the brand of century oak as produced by the company is widely known. Vice-President W. J. Eckman stated that conditions are entirely satisfactory.

INDIANAPOLIS

The planing mill of Samuel Lanum at Bloomington was burned Dec. 14, the loss being \$6,000, covered by insurance.

George C. Fuller, Lebanon, suffered a loss of \$6,000 when his sawmill and woodworking plant were burned recently. About \$1,000 insurance was carried.

The Eaglesfield Company, which was succeeded by the Eaglesfield-Stewart Company, manufacturer of hardwood flooring, has sold its old plant in Alvord street to Alonzo E. Robbins for \$17,-

000. Mr. Robbins was a stockholder in the Eaglesfield company.

For a consideration of \$12,000, Nelson A. Gladding, vice-president of E. C. Atkins & Co., has bought a site for a new home in Washington Boulevard.

The Indiana Better Roads Convention, held here Dec. 11, 12 and 13, adopted a resolution in favor of placing all highway construction and maintenance under a state board of highway commissioners and to raise a fund for the work by a special tax of one-half cent on each \$100 of taxables in the state and by an annual license on all motor vehicles including traction engines. Such a fund would amount to about \$1,000,000 a year. A bill incorporating the recommendations will be introduced in the legislature next month.

The death of Hugh Murdoch occurred at his home in this city on the night of Dec. 16, as the result of an operation for the removal of a goiter. He was a member of the Murdoch Veneer and Lumber Company and also had veneer and timber interests in the South. Mr. Murdoch was born in Shelbyville, coming to this city in 1908. He was thirty-three years old. A widow survives. Burial was at Shelbyville.

MEMPHIS

Among the recent prominent visitors to Memphis have been Charles Barnaby, president of the National Hardwood Lumber Association, and Lewis Foster, secretary of the Hardwood Manufacturers' Association of the United States. Both of these gentlemen gave out encouraging accounts of the outlook for business and were in a rather optimistic mind regarding the future. Mr. Foster comes to Memphis every few weeks, but this is the first visit Mr. Barnaby has paid to this center for quite a long while.

W. H. Russe of Russe & Burgess, Inc., will be named chairman of the special committee to be created by the Business Men's Club for the purpose of keeping Memphis and Memphis products before European buyers. Mr. Russe has for a number of years been quite prominently identified with the export business and is quite familiar with the foreign methods of business as well as with the needs of European buyers. This committee will be charged with the duty of seeing that Memphis manufacturers and distributors are enabled to do a more extensive business with foreign markets than at present.

Visiting lumbermen will find the secretary of the Lumbermen's Club on the sixth floor of the Business Men's Club, or if he is not there he can be located by communication with J. M. Tuthers, general secretary of the Business Men's Club. The recent adoption by the Lumbermen's Club of the affiliation agreement of the Business Men's Club has resulted in the foregoing arrangement. The secretary of the Lumbermen's Club will do all of his work at this office and in order to facilitate matters for him the Business Men's Club has agreed to furnish stenographic service and to render any other assistance necessary. The new arrangement is regarded as particularly advantageous to the Lumbermen's Club inasmuch as it secures free clerical work and also headquarters. It likewise has in this way the moral support and backing of the Business Men's Club in all problems coming up for consideration.

The Muirhead Lumber Company has branched into the manufacture of hardwood lumber, with special reference to hickory and oak dimension stock. The company has purchased a large tract of timberland near Weldon, Ark., and a tramway has already been built to facilitate the development thereof. This firm formerly had its headquarters at Newport, but has moved these to Weldon in order to make the development of its holdings easier. The firm operates plants at both Weldon and Gregory. In addition to hardwood manufacture, the gentlemen identified with this firm are operating a stave plant under

the name of the Weldon Stave Company. There is also an allied firm known as the Muirhead Shingle Company. The latter is engaged in working up cypress timber which belongs to members of the firm.

NASHVILLE

During the past month the building permits here totaled more than four times the amount for November a year ago, those for November, 1912, being \$256,958 and the amount for November, 1911, being \$62,801.50. Some large permits have been issued during the past month, including one for a handsome \$80,000 business house.

The Milne Chair Factory plant was totally destroyed by fire at Cleveland, Tenn., Dec. 6, the loss being fully \$150,000. The origin of the fire is unknown. There is talk of rebuilding the plant at Chattanooga but this is being resisted by the citizens of Cleveland who have offered special inducements in the way of tax exemptions, etc., if the company will remain in that town.

The Mobile & Ohio Railroad has been given the right by the Interstate Commerce Commission to establish a thirteen-cent rate per hundred pounds on lumber in carloads from main line points north of Meridian, Miss., to Antesia, Miss., inclusive of Nashville.

Active logging operations have opened on the Tennessee river and during the week past more than 160,000 feet of poplar, oak and other timber have been rafted down this stream.

Indications point to an early advance in furniture prices throughout this territory. Representative manufacturers from throughout the Middle South met in Nashville the other day and the above statement followed their conference. The decision was unanimous on the part of those present. Steady advances in the prices of labor and material, especially the latter, are the causes assigned. This question has been under consideration for some time and the decision here is merely a part of a movement that is sweeping the entire country. About twenty-five representative men were at the meeting which was called at the instance of Nashville, Memphis and Chattanooga manufacturers.

Dan Rose of the Knoxville lumber fraternity was a visitor on this market recently.

C. L. Dews of the Woodcliff Lumber Company, Monterey, Tenn., was here recently on a business trip and reports activity in the lumber business in his section.

Tom Le Sueur has returned from a vacation trip to Arkansas where he hunted and fished with good luck.

LOUISVILLE

T. M. Brown of the W. P. Brown & Sons Lumber Company attended a meeting of the board of trustees of the National Wholesale Lumber Dealers' Association in New York last week.

D. E. Kline of the Louisville Veneer Mills has returned from the annual meeting of the National Veneer and Panel Manufacturers' Association, held in Chicago.

Barry Norman, vice-president of the Norman Lumber Company, has come up from Holly Ridge, La., where he has been looking after the operations of the company's mill there, to spend Christmas with his relatives. The J. A. Fay & Egan saw ordered for the mill will be in operation by Jan. 1.

Local lumbermen have received advices to the effect that the Louisville & Nashville Railroad Company has made tentative proposals looking to the substitution of flat rates for the present milling in transit arrangement at Evansville, Louisville, Nashville and Memphis. If the present net rates can be retained under the flat rate arrangement, it is believed that it would be favored by lumbermen. The matter is not yet definitely in hand.

The Louisville & Nashville Railroad Company seems to be in for a beating on its switching proposition in Louisville. It refused to deliver cars originating at competitive points to shippers having an outlet only upon its tracks. The Board of Trade, backed by the lumber and other shipping interests, has started a fight which will be taken to the Interstate Commerce Commission, and the presentation of a bill in Congress by Representative A. O. Stanley of Henderson, Ky., in which it is provided that carriers must receive such competitive business, seems to top off the action needed to bring the Louisville & Nashville around.

Louisville hardwood men have received notice that the next hearing of the Interstate Commerce Commission on the proposed advance in rates on lumber from the South will be held at Cincinnati Jan. 24. It will take up the question where it was left off at St. Louis last week.

The Louisville & Nashville Railroad Company is to spend approximately \$140,000 for a creosoting plant to be erected at Guthrie, Ky. It will treat ties, bridge timbers, etc.

Owing to the alleged depredations of log thieves along the Kentucky river, who sink logs and then recover them, being permitted by statute to require the payment of salvage on such logs, the sawmill men along the stream have organized the Kentucky River Sawmill Association and will handle all of the business of raising and disposing of sunken logs through this organization, which is incorporated with \$800 capital stock. The members of the association are the Ohio Valley Tie Company, Louisville; Mowbray & Robinson, Cincinnati; Reliance Manufacturing Company, Jackson; Eversole Lumber Company, Frankfort; Belle Point Lumber Company, Belle Point; J. D. Hughes Lumber Company, High Bridge, and Basil Kenney Lumber Company, Frankfort. The officers are E. O. Robinson, president and treasurer; J. D. Hughes, vice-president, and W. S. Rosson, secretary. Mr. Rosson's address is Frankfort, Ky.

S. P. Chandler of the Buckeye Veneer Company, Dayton, O., was in town recently. He reported that the Capital slicer installed July 1 has been working overtime to supply the demand for slice-cut oak stock.

ST. LOUIS

The Garretson-Greaseon Lumber Company is having a steady demand for railroad and cur material. Mr. Garretson, president of the company, was at the Brockett mill last week, having been called there on account of an accident to one of his old employees. W. W. Dings, secretary of the company, says he is well satisfied with the volume of business being done and the prices obtained.

E. H. Luehrmann of the Chas. F. Luehrmann Hardwood Lumber Company states the company is having a good call for the majority of its principal lumber stocks. This is especially true as to choice red gum, of which it makes a specialty. Oak is also in good request. Although the calls have been frequent and numerous it still has a big stock of nearly everything in the hardwood line and can fill all orders.

Charles E. Thomas of the Thomas & Proetz Lumber Company visited Memphis on business a short time ago.

The Thomas E. Powe Lumber Company recently suffered a loss of lumber worth about \$6,000 by fire.

R. F. Krebs of the Krebs-Scheve Lumber Company reports a good volume of business for this time of the year. The outlook, he says, is good for next year and he believes business will start early.

George A. Cottrill, secretary of the American Hardwood Lumber Company, reports that while the market has been quiet recently owing to the nearness to the holidays, conditions are satisfac-

tory. The car shortage is easing up gradually and will soon be normal.

The Steele & Hibbard Lumber Company is having a seasonable volume of trade, with every indication of an early start soon after the beginning of the new year.

MILWAUKEE

The offices of the state free employment bureau advise that lumber camps in northern Wisconsin and the upper peninsula are no longer in need of men. Some time ago the shortage of help was severely felt at the logging camps, although good wages were offered. Many concerns applied at the free employment offices to secure men to work in the woods, which resulted in securing positions for a large number.

Two timber companies have been formed at Janesville and articles of incorporation filed with the secretary of state. The Coquille Timber Company, with a capital of \$150,000, and the Union Timber Company, also with \$150,000 capital. Both companies are incorporated by O. A. Oesterich, L. A. Avery and L. Westlake.

E. C. True of the American Timber Holding Company and Albert Leeland, both of Milwaukee, are at the head of a new motor boat factory to be located at Waukegan, Ill. The concern will be incorporated under the laws of Maine with \$100,000 capital stock, and will be known as the Waukegan Motor Boat Company. A \$50,000 factory will be erected. Mr. Leeland will be resident manager.

The building inspector of Milwaukee reports that permits issued during the first week of December brought the record for the year above the \$15,000,000 mark and that the total building record for the year would be close to \$15,500,000. This will mean an increase of about \$3,000,000 over the building record of 1911 and is largely responsible for the tremendous gain in the lumber business during the past few months.

The warehouse of the Menasha Woodenware Company, Menasha, Wis., was destroyed by fire on Dec. 7. The loss is estimated at \$10,000, and includes a large stock of unfinished staves.

The North-Western railroad was ordered to reduce its rate on tan bark from 11½ to 8½ cents by the State Railway Commission. A refund of \$298.05 was also ordered by the commission on excess charges by the railroad on shipments of tan bark from near Wausau to Sheboygan by the Barker & Stewart Lumber Company.

A contract for logging 1,500,000 feet of hardwood timber for the Kiel Wooden Ware Company, Kiel, Wis., has been awarded to Scheldt & Dekeuster of Wausaukee. The timber is situated at Mitchell Spur, near Channing, Mich., and will be used in manufacturing cheese boxes and veneers.

Frank Wittcock of Wausaukee has started a logging camp at Randville, Mich., where he will cut 6,000,000 feet of timber, mostly hardwood, for the J. W. Wells Lumber Company. The contract covers three season's work, and the logs will be shipped to Menominee for sawing.

About 350,000 feet of timber will be cut this winter at Taylor Rapids by John Regan of Oconto. Mr. Regan has been cutting on this tract for the past two seasons for the J. W. Wells Lumber Company, who again gave him a contract this year.

The sawmill of the Hatten Lumber Company at New London, resumed operations last week after a shut down of two weeks for repairs and overhauling. With the exception of a few days during last summer's flood, the mill had a steady run since Dec. 16, 1911. As soon as a fall of snow facilitates the getting out of logs, the mill will run both night and day.

The McDonough Manufacturing Company of Eau Claire, has received several more large orders for sawmill equipment. Orders which will require both day and night shifts for sev-

eral months were received from Ludington, Mich.; Ruel, Ontario, and the Bahama Islands.

Erny Brothers of Racine have acquired the new veneer factory at Edgar, which was erected about a year ago. It will be converted into a basket factory by the new owners, who expect to start operations about Jan. 1, with a capacity of 400 dozen baskets a day. About a hundred men will be employed at the start.

The Willison Manufacturing Company of Appleton, now holds third place in capacity among meat and shoe block manufacturers in the country. Six new machines, making eighteen in all, will increase the capacity forty per cent. The capital stock has been increased to \$30,000.

DETROIT

The Cadillac Motor Car Company has put out a requisition for 1,200,000 feet of hardwood lumber, mostly ash, walnut and birch. Other automobile companies have been placing generous sized hardwood lumber orders and the dealers have derived a very good business from this source alone.

R. A. Stitzinger of G. G. Stitzinger & Co., New Castle, Pa., was in Detroit on a business trip during the week.

The Brownlee-Kelly Company reports business in a booming condition and that many big orders were received during the past month. Mr. Brownlee says the demands for hardwoods of all kinds is very brisk and prices are still climbing.

The steamer Hugh Haverly with a cargo of hardwood arrived at the Brownlee-Kelly Company

docks Dec. 18, which was exceedingly late in the season for a lumber boat to be in service. She carried 400,000 feet of mixed hardwoods.

J. H. P. Smith, Chicago representative of the Babcock Lumber Company, Pittsburgh, Pa., was in Detroit this week on a business trip.

George I. McClure, who represents the Hanson-Ward Veneer Company in Detroit, says that that company intends to cut 8,000,000 feet of timber, mostly hardwood, during the winter. Mr. McClure expects that large consignments of this cut will be shipped to his lumber yards at Clark and Plumer avenues. He predicts a large demand for hardwood lumber in Detroit next spring and summer and cannot see how prices will drop.

J. P. Scranton & Co. report that low-grade hardwood is very scarce and that crating stock is also hard to get. Labor conditions have improved and there is but little trouble in getting men.

Thomas Forman of the Thomas Forman Company says that on account of the tremendous amount of building going on in Detroit, the mill will be busy all winter turning out hardwood flooring. It is doubtful whether this year's orders can be cleaned up by the time building operations begin in the spring. At present the mill is working on an order for 335,000 feet of two-inch maple flooring. Mr. Forman says that dry stock is scarce and prices are sure to advance before spring on this account.

Claude Sears of Louisville, Ky., visited the Detroit market during the past week.

attending shipments for export make this business less desirable, and exporters are cautious about forwarding stocks.

PHILADELPHIA

Notwithstanding the near approach of the holiday season, an unusually strong activity obtains in the buying market, and the most conservative lumbermen are positive in their belief that 1913 will see an aggressive expansion of the lumber business. There is no apparent change in the hardwood stock situation at this time, and it is safe to assume that the stock pile in standard woods will increase but little for months to come. Never in the history of the lumber business have so many buyers in one season been obliged to scout the lumber regions for necessary material. But for unreliable mill connections and the inadequate car service the lumberman this year could look forward to a bountiful and joyous Christmas.

The consuming industries continue busy, but a slight let up in buying may be looked for as the stock-taking season advances. Yard men in both Philadelphia and New York, who cater extensively to builders, have been naturally affected by the dearth of building work during the summer and fall, but as there has been a concerted action on the part of the builders and trust companies to curtail operation work for the prevention of a slump in the real estate market, the general advantage in the future will more than counterbalance the present gap in this line of business.

Oak, red and white, still holds front rank, with red oak climbing; quartered oak is advancing. Ash, chestnut, birch and beech are all well up in place. Maple is strong. Poplar is unchanged with the exception that low-grade stock is active. Gum continues to gain favor in the eastern market and mahogany and veneer trading holds firm. Cypress makes new friends.

The Hardwood Market

CHICAGO

Unchecked activity in all lines of hardwoods marks the situation in Chicago. In a few cases buyers are resorting to small orders in anticipation of inventory taking, but the bulk of orders are of the usual proportions, being mainly for delivery some time after the first of the year. It is expected that the last week of 1912 will see more of a slackening up in immediate orders than the two weeks preceding, but there is every evidence that continued increase in demand and values in hardwoods will be resumed after the opening up of the new year's business.

Healthy business is reported at all the consuming factories, and fair weather conditions have materially enhanced building operations in the Chicago territory. Car building has continued on an active basis calling for a greater quota of hardwoods than it had been using for past months preceding the car shortage.

Difficulty is still experienced in making shipments on account of the inability of getting cars in some instances. This has resulted in rather depleted stocks of hardwoods in the yards, and there seems to be little opportunity of stocking up in anticipation of the spring orders. The same condition regarding the different woods is manifest in the Chicago market as in other markets. Ash is one of the strongest items in hardwoods all over the country and is particularly strong in the Chicago territory.

Plain oak is extremely scarce and quartered oak is gratifyingly active. The latter wood shows every evidence that its consumption and price will continue to be highly satisfactory. The usual demand from the box manufacturers keeps cottonwood, poplar and the gum situation in good shape.

BUFFALO

The hardwood trade has been as good as could be expected during December, having been bet-

ter the latter part of the month. At present there is general holding off until the completion of inventories, but trade is counted on to pick up again about the middle of January. Some trouble has been experienced in getting cars to load, and receipts of lumber have been a little slow on account of the congestion existing in the South.

The yards have been shipping out a good amount of oak and buyers are willing in many cases to take either red or white, depending upon which is the easier to get. Thick ash is very strong. Chestnut also is firm, high-grade stock selling about as fast as it comes in. Maple and birch are moving fairly well and sales this year in these woods have been quite heavy. Elm and basswood are in fair sale.

NEW YORK

The hardwood market continues firm and active. The call for quick shipments is still heard and the yard trade is steadily in the market for stocking up. The low supplies on hand and the steady demand of the past several months are features of the market. The yards are still buying freely and it is expected that they will continue in the market for some time. The local manufacturing trade is busy and a steady buyer. Ash is in stronger demand than anything else on the list, and is selling at advanced prices, particularly 5/4 and thicker. Plain oak is also in active demand and low-grade poplar is in good call. The remainder of the list is showing up well.

The export demand is good, but dealers are slow to go after the business. The recent ruling of the Interstate Commerce Commission on through bills of lading is one reason why shippers are not anxious for export orders, and the heavy advance in freight rates which has been announced for next year and the difficulties

BOSTON

The market for hardwood lumber shows no abatement in the strength with which prices are held but actual demand for prompt shipment has ruled rather slow during the past two or three weeks. Many of the consumers of hardwoods are not oversupplied at the present time, but they are not anxious to take on larger stocks until after the turn of the year. This is not unusual, as buyers always figure on having their stocks reduced at inventory periods. Some orders are being placed with the request that no delivery be made until after the first of January. Advices from the mills indicate comparatively small stocks. There is no desire on the part of manufacturers of hardwood lumber to force sales. Many of the large manufacturers of the country write their correspondents in this city that they have plenty of orders yet unfilled on their books and that they are not anxious for additional orders excepting at full asking prices.

There is a very good demand for plain oak in this market and prices hold firm. Quartered oak has also been in very good call and values are well held. Black walnut is in fair demand. The small offerings force buyers to make several inquiries for the same lot of lumber with the result that the market has a more active appearance than really exists. Maple is firm and in demand. The call for birch and basswood is moderate.

PITTSBURGH

Hardwood men are feeling good over the outlook for 1913. Their business this year has been considerably better than in 1911. Nearly every hardwood concern in the city is well satisfied with the trade the past four or five months. Many of them are planning to increase their sales force or strengthen their connections the first of the year in anticipation of a much larger

business. Factory trade is showing up remarkably well in the requisitions. Purchasing agents are asking for more lumber and seem more willing to pay a good price for their stock than last year. Trade with the mining and industrial concerns has very seldom been better in this district than just now. Railroad work will require an enormous amount of lumber next year, and the prospects for oak sales on this account were never better. In fact oak is now so scarce that it is almost impossible to get enough good white oak to fill the orders. Yard trade is a little quiet this month on account of the inventory season. The prospects are that it will be very much better as soon as spring building starts, for stocks are low and contractors look for a much better building season next year.

BALTIMORE

With the year drawing to a close, interest in the results of 1912 is intensified among lumbermen. It is known in a general way, of course, that the trade has been very active for some months, and that the inquiry continues to be so brisk as to cause a general scarcity of stocks. Under the influence of the inquiry and the inadequacy of the offerings, prices have gone up until oak is perhaps higher than it has ever been, while the weak spots in chestnut have been strengthened until there are none left, all other hardwoods being in satisfactory shape, with the single exception of extra wide poplar.

The producer of lumber, provided he has a good lot of timber and an effective mill organization, stands in the way of making large profits, for intending buyers do not haggle over the price, being intent chiefly on their ability to get what they want. The manufacturers have been and still are in a position to dispose of their output as fast as it could be gotten ready for the market. In numerous instances they are behind in their deliveries, and it has happened often that lumber was sent out green, buyers being in urgent need of supplies.

Varying explanations are given, some members of the trade taking the view that the present apparent scarcity is due not so much to a comparative increase in the demand as to the shortage of last winter, when for several months the mills were entirely out of it. The fact is emphasized that when the severe cold had abated, heavy rains transformed the roads into quagmires and rendered it impossible to get logs to the mills and lumber away from plants. The first half of the year, therefore, must be credited with a material deficiency in the production, and this shortage has not been in reality made up, though under circumstances of an indifferent demand there ought to have been a considerable gain in the production over the distribution in the latter half of the year, the weather having been such as to favor mill work. Account must be taken of the fact, however, that labor has been scarce during the greater part of the year, and manufacturers have often been unable to get workmen in sufficient numbers to run plants at their full capacity. On the other hand, the distribution was much impeded, first by the stevedores' strike here, which lasted for about two months, the steamship companies finding it impossible to get their vessels loaded, and the coastwise traffic being similarly affected. After this difficulty had been removed came the advance in the ocean freight rates, which naturally caused hesitancy among the exporters because of the fact that the increase assumed proportions which made it necessary to adjust the trade upon a new basis, for the augmented expense could not be absorbed by the shippers. This impediment is still exerting a decided influence upon the trade. When all these factors have been taken into account, however, the fact remains that even though exports were checked, the offerings in the domestic market did not show any indications of becoming larger, which ought to have been the case

unless the domestic requirements at the same time expanded. The conclusion, therefore, is almost unavoidable that an actual shortage of lumber exists and that this is primarily, perhaps solely, responsible for the present high prices and the firmness in the market.

COLUMBUS

The lumber trade in Columbus and surrounding territory is holding up remarkably well for the time of year. Prices are stiff and there is a good demand for all grades of hardwoods. A continuation of the good business is expected. The hardwood market at this time is very active, there being a good demand for oak, especially in flooring and quarter-sawn stock. The lower grades of hardwoods are also a strong point in the market, especially ash and poplar, and there is a good demand for chestnut in the sound wormy grade. Yellow pine does not show much activity at this time of the year. The factory trade continues good with manufacturers and millmen wishing to lay in large supplies. The yard trade is a little slow and dealers seem to think that prices will drop, after which they will stock up. The car situation shows a slight improvement over the past week, but is still felt in certain locations. Building operations are active.

CINCINNATI

Weather conditions are again ideal for lumbering, after a touch of winter, which only lasted a few days last week. The fall this year has been remarkable for beautiful weather, and every line of trade has been benefited more or less, especially the building trade, which has been one of the heaviest in several years. Consequently the retail lumber dealers have done a very big and profitable business in all kinds of building lumber and millwork. Planing mills have been rushed to supply the demand right up to the present time, and owing to the weather holding out so long and favorable to building operations, builders have gone right ahead with new work. The hardwood dealers have been much benefited by this big building season, as this year hardwoods are largely used for interior finish in place of yellow pine. Plain and quartered oak is used to a great extent, but much red gum has also been used this season and the results are so satisfactory that architects will not hesitate to recommend it to prospective builders of homes who are seeking something different in finish.

Stock is coming in more freely than for the last couple of months and the dealers are getting some stock ahead and will be big buyers all winter, taking all offerings of hardwoods in all kinds and grades at reasonable prices. At producing points millmen report plenty of logs and plants running full time with favorable weather. The demand is quite up to the production; in fact, nearly all of the mills are sold ahead, many of them well into next season and at stiff prices. The dealer who is not covered for several months' supply is not in any too strong a position, and will find much difficulty in picking up hardwoods from which to supply his trade. This supply will come mostly from the small millman and the buyers are so numerous in the producing fields among both large and small mills that it will be quite a problem for the dealer to get what he will require.

Trade conditions are about as good as could be expected for this time of the year. Prices on all stock are high and none of the dealers are looking for cheap lumber, as they know it is not to be had. Plain and quartered oak are very much in demand. Low-grade cottonwood is very scarce, as is the same in poplar, gum, basswood and buckeye. Thick ash is very high in price and called for daily in quantities. The high grades in hardwoods are most in demand at this time and are bringing good prices. Hardwood

flooring is moving very fast at top prices. All mills are running full time and will do so all winter in an effort to stock up for next season.

INDIANAPOLIS

The hardwood trade in this locality has been about ten per cent better than it was in 1911. Hardwood men are especially well pleased with the volume of 1912 business, considering the fact that for the first six months of the year the business was behind that of the corresponding period of last year.

Business has not slackened up so far in December, as was expected, but has been better than it was during the corresponding period of last year. Prices are steady, with no indications of a decline soon. The principal demand is for plain oak with a fair trade in ash.

Hardwood men report that the car shortage is loosening up and that they are no longer bothered or inconvenienced on this score to any great extent. The trade as a whole is in a very satisfactory condition.

MEMPHIS

The car situation is considered very much better. The movement of both timber and lumber is showing some increase as a result of this condition. The improvement is quite notable from many points in Arkansas and Mississippi, where cars were exceedingly scarce only a short time ago. It is not possible even yet for all shippers to secure their full quota of cars, but the improvement now in progress is quite rapid and the outlook is regarded as decidedly more favorable.

The movement of timber to Memphis continues on a pretty liberal scale. It is noteworthy, however, that there is such activity on the part of manufacturing plants that there is little, if any, accumulation of logs at local yards. Most manufacturers say that they have enough logs on hand to last them for only two or three days. There is a great deal of timber awaiting transportation to Memphis, and it is possible that the log supply of local plants may become a little fuller. However, this depends very largely upon the ability of the railroads to furnish all the equipment that is needed. Although the situation in this respect has very much improved, the Valley Log Loading Company says that it is still restricted somewhat in the handling of log shipments by scarcity of equipment.

One of the features of the hardwood situation has been the tendency toward improvement in export demand during the past few days. There have been numerous inquiries, and it is said by prominent exporters that they could do a large business if transportation problems were solved. The railroads west of the Mississippi river are still refusing to issue through bills of lading on hardwood lumber shipment intended for export with the result that shippers are having a great deal of trouble.

NASHVILLE

The local demands for hardwoods are good for this season of the year, when trade is generally getting rather slack on account of the holiday season and the time for the annual taking of stocks.

Plain oak is scarce and the prices show an upward tendency. Quartered oak is more plentiful and is maintaining high figures. Chestnut, gum, ash and hickory are selling well. There is continued good call for maple and walnut. No change is noted in the poplar market. Other woods are about holding their own.

There is much railroad traffic activity. There are heavy log shipments reported on the Tennessee river. Dry stocks are getting low and all available is in ready demand. Manufacturers anticipate much activity beginning early in 1913. Some orders have already been received for

1913 shipments but most manufacturers do not seek such advance orders.

There continue to be active calls from the furniture, vehicle, railroads, car building and other consuming concerns. Cold weather has caused a slight falling off in the retail trade. General rains have brought a return of a good boating season and this means renewed activity all along the Cumberland river. The box, sash, door and blind makers are after good material. Inside finishing materials are in good call.

ST. LOUIS

Business in hardwoods is unusually good, considering that the holidays are so close at hand. Owing to the fine weather which has prevailed up to the present time, more than the average trade has been done. Lumber, too, is coming in better than it did, on account of more cars being available for shipments. This has increased the receipts considerably. Nearly all items on the list are being called for. Plain red oak leads in the demand and it goes out as fast as it comes into the market. Plain white oak is also in excellent request. Red and white quartered oak are holding their own. Inch stock ash and thicker is moving nicely. Poplar is a poor seller. Both gum and cottonwood are holding their own. Cypress is holding its own, but dealers are well pleased with the volume of business they are doing. The demand is not quite as active as it was, but that could be expected when one considers that the first of the year is now only a few days off. Most of the factory demand is for quick shipments and in small lots. The yards have shut down buying almost entirely.

LOUISVILLE

The demand for hardwood lumber has slowed up somewhat, as far as new business is concerned, on account of the holidays. The prospect of taking an inventory on January 1 always chills the ardor of the buyer, and enforces a desire to travel light as to supplies. This is a case of not letting the right hand know what the left is doing, and many men keep a lot of secrets from their books. The refusal to purchase for immediate delivery has not stopped buying altogether, however, as a lot of orders

are on the books of local concerns providing for delivery immediately after the turn of the year. Thus far December has been an extremely good month, shipping going right ahead without a let-up, orders already placed being more than sufficient to insure activity in the yards.

Some canny buyers who placed a lot of orders for plain oak a good while ago, months, at any rate, are now digging these up and making specifications for immediate deliveries. Lumbermen who were hoping that they would not be called upon to deliver on the basis under which the business was secured are now beginning to realize that plain oak sold all too cheaply last summer.

The feature of the situation continues to be an active demand for quartered oak, with quartered white leading, naturally, and plain red holding the fort in that line. Thick plain oak is a scarce item at present, and an inquiry for 75,000 feet of 3" No. 1 common has circulated through several markets herabouts without producing anything definite. Hickory, ash and chestnut are good. Poplar is slightly dull in the upper grades. Cottonwood and gum are in good demand, and mahogany is firm.

MILWAUKEE

The hardwood business is holding up especially well for this season of the year and wholesalers do not anticipate the bad slump usually experienced during the holiday season. Demand is good from most sources, but especially so from the general factory trade. Practically all the sash and door and interior finish manufacturing concerns are looking for a record breaking business next year and are preparing their stocks accordingly.

The head of a large sash, door and blind house says that business is better than it has been at this time in the past fifteen years; that the trade has increased at a remarkable rate during the last quarter of the year and that all prospects indicate that a big business will be experienced all of next year. He believes that the total business of the past year in the Milwaukee sash and door field would show an increase of at least fifteen per cent as compared with that of 1911.

The box factories are stocked up fairly well and are not buying quite so heavily in low-grade hardwood. Most of the manufacturing concerns have been farsighted enough to buy rather liberally in the past few months and thus to a certain extent have avoided the high prices. However, many concerns are low on stocks and have very little chance at the present time of getting what they want. There is still a genuine shortage in some lines.

The demand is good for inch birch and prices in this line are strong. Reports from some northern lumber points say that birch stocks will hardly last until the middle of January. Maple is selling well in all thicknesses, but there is very little No. 1 and No. 2 on the market. Low-grade maple is much in demand, however. Basswood is in brisk demand, with the possible exception of No. 3, which is about out of the market. Elm is scarce. In the southern woods, both plain and quartered oak are in the lead.

DETROIT

Orders and inquiries have been plentiful in the Detroit hardwood market the past fortnight and excellent business is reported in every branch of the trade. A feature of the market has been the steady increase in prices on most every grade of hardwood. There has been a big demand for ash, walnut and birch from the automobile body and accessories companies. A large automobile concern recently sent out a requisition for 1,250,000 feet of hardwood lumber, mostly ash but also good quantities of walnut and birch. Other motor car companies have also been purchasing liberally.

The box and crating companies have been

buying in good lots and great activity is reported in these trade. Exceptionally good business is also reported in the hardwood flooring trade. The majority of dealers and manufacturers are extremely optimistic for spring and summer business, believing that the building boom predicted for this spring by architects and builders will keep hardwood moving at a lively rate.

GLASGOW

The business in this market is quite satisfactory, a cheerful tone being maintained, with no special line outstanding. Prices of all kinds of wood are advancing and with the light imports and dwindling stocks, the tendency is still upward. Inquiries are numerous for prompt and forward delivery, but in many cases the prices prohibit anything further being done. At present it seems that buyers who are covering their requirements at current rates will consider themselves fortunate later on, as with advanced yearly contract rates coming into operation in January, *e. i. f.* values will be further inflated, so that nothing can be gained by waiting. So far as brokers are concerned, there is no undue anxiety to enforce sales, but to hold out for top figures, and even if storage charges are incurred, it will be to their ultimate advantage. With prices for the various lines advancing toward the end of the season, buyers will not readily pay such advances, but, had the advances taken place earlier in the season, which could easily have been done and obtained, buyers long ere this would have become reconciled to the higher values.

The spruce and pitch pine markets are unique at present in this respect. Freight to the United Kingdom are not nearly so high as those quoted and paid to other parts; supplies are plentiful, but still shippers have held back all along. The current prices for spruce of a year ago have seen an advance of not less than 33 per cent, with the prospect of a further rise in the near future. Most buyers in this market, however, will not pay this increase, as Rigas can be bought at lower prices.

The steamship *Indrani* has arrived from Newport News with the usual varied cargo, particularly oak and poplar. This shipment has met with a good request, as is evident from the large quantity being cleared on ex quay basis. The demand for oak is quite equal to the supply. Some of the oak, however, is not up to the standard grade, but as the policy just now is "take it or leave it," complaints are unheard of. However, if the supply were in excess of the demand, this would not apply, as buyers would not take up the goods. Wagon builders are very busy and 12-inch x 5-inch and 3½-inch sizes are rapidly bought up. Consignment parcels should do particularly well. Furniture makers are also busy and enhanced prices are being obtained both for parcels ex quay and ex stock. Quite a number of oak squares have been coming in, ranging from 2-inch x 2-inch to 3½-inch x 3½-inch, and these have sold well. A carload of quartered oak flooring strips has arrived, but price asked has not been given so far. No difficulty should arise in obtaining a full price once they have been stored for a few weeks. Any consignment of walnut boards arriving meets with prompt disposal provided quality is right.

Contracts for birch planks and logs are now briskly proceeding and increased prices are being obtained for the lower port shipment.

Shipbuilders continue busy, as also are packing-case makers, whose supplies require to be drawn chiefly from the Baltic.

The exporter has seldom had so many problems: current freights for ports not governed by contract arrangements are astonishingly high and shippers are finding transactions difficult. Troubles are further increased by restrictions on through bills of lading, demurrage charges and shortage for inland transport and also by sea.

THREE STATES LUMBER CO.
Manufacturers of
SOUTHERN HARDWOODS
Cottonwood and Red Gum
SPECIALTIES
Main Office, Memphis, Tenn.

BLUESTONE LAND & LUMBER COMPANY

MANUFACTURERS

West Virginia Hardwoods

SOFT WHITE PINE
OAK POPLAR
CHESTNUT HEMLOCK

BAND SAWED STOCK

Complete Planing Mill Facilities

RIDGWAY, PENNSYLVANIA

W H Y ?

WHY DO more than 320 of the most prominent and successful lumber manufacturers exchange nearly \$26,000,000 of indemnity against fire loss at

Manufacturing Lumbermen's Underwriters

B E C A U S E !

BECAUSE it is the oldest and strongest inter-insurance association among lumbermen, being now in its fourteenth year.

BECAUSE \$728,910.41 cash savings have been returned to members.

BECAUSE \$756,787.21 cash surplus, owned entirely by the members, has been accumulated.

BECAUSE \$2,012,427.96 has been paid in losses under prompt and equitable adjustments without resort to quibbling or technical controversy.

BECAUSE it was the first to settle lumber losses on a market value basis.

BECAUSE the regular, frequent and thorough inspections given the plants of all members help them to prevent fires, thus materially reducing both the fire waste and the cost of indemnity.

FOR FULL PARTICULARS ADDRESS

Western Representative
HARRY B. CLARK,
Portland, Ore.

Harry Rankin & Co.

Attorney in Fact,
KANSAS CITY, MO.

Advertisers' Directory

NORTHERN HARDWOODS.

American Lumber & Mfg. Co....	15
Beecher & Barr.....	14
Bradley, E. C., Lumber Co.....	12
Buffalo Hardwood Lumber Co.....	68
Coale, Thos. E., Lumber Company..	14
Cobbs & Mitchell, Inc.....	3
Craig, W. P., Lumber Co.....	15
Curl, Daniel B.....	14
Darling, Chas. & Co.....	53
East Jordan Lumber Company	60
Elias G. & Bro.....	66
Estabrook-Skeele Lumber Co.....	4
Flanner-Steger Land & Lumber Co.	4
Forman Company, Thomas.....	60
Goodyear, C. A., Lumber Co.....	59
Hadentine Lumber Company, Inc....	1
Hanson-Turner Company.....	62
Heyser, W. E. Lumber Co.....	11
Holyoke, Chas.....	15
Holloway Hardwood Lumber Co.....	
Jones Hardwood Company.....	14
Kent, J. S., Company.....	14
Klann, E. H.....	53
Kneeland-Bigelow Company, The....	3
Litchfield, William E.....	14
Long-Knight Lumber Company	
MacLaren, D. B., Lumber Company.	65
McIlvain, J. Gibson, & Co.....	2
McLean, Hugh, Lumber Co.....	66
McParland Hardwood Lumber Co....	53
Miller, Anthony.....	66
Mitchell Bros. Company	3
Mowbray & Robinson.....	11
Oelhafen Lumber Company.....	59
Osgood & Richardson.....	53
Palmer & Parker Co.....	14
Perrine-Armstrong Company.....	59
Salling-Hanson Company.....	60
Sawyer-Goodman Company.....	59
Schultz, Holloway Co.....	4
Smith, Fred D.....	53
Standard Hardwood Lumber Co.....	66
Stearns Salt & Lumber Company.....	8
Stephenson, I., Company, The.....	60
Stewart I. N. & Brother.....	66
Stimson, J. V., & Co.....	64
Sullivan, T. & Co.....	66
Tegge Lumber Co.....	
Vinke, J. & J.....	59
VonPlaten Lumber Co.....	60
Webster Lumber Co., George.....	15
White, Wm. H. Co.....	68
Wixson, H. D.....	15
Williams, Ichabod T., & Sons.....	1
Willson Bros. Lumber Company.....	14
Wisconsin Land & Lumber Co.....	60
Wistar, Underhill & Nixon.....	14
Wood-Mosaic Company.....	15
Yeager, Orson E.....	66
Young, W. D. & Co.....	3

SOUTHERN HARDWOODS.

American Lumber & Mfg. Co.....	15
Anderson-Tully Company.....	9
Atlantic Lumber Company.....	1
Baker-Matthews Mfg. Co.....	65
Bennett & Witte.....	11
Bluestone Land & Lumber Co.....	49
Boice Lumber Company.....	10
Booker-Cecil Company.....	5
Bradley, E. C., Lumber Co.....	12
Brown, W. P., & Sons Lumber Co....	5
Buffalo Hardwood Lumber Co.....	66
Carrier Lumber & Mfg. Co.....	16
Cherokee Lumber Co.....	7
Coale, Thos. E., Lumber Company.....	14
Curl, Daniel B.....	14
Darling, Chas. E. & Co.....	53
Davis, Edward L., Lumber Company	5
Dempsey, W. W.....	65
Duhlmeier Brothers.....	12
Elias G. & Bro.....	66
Estabrook-Skeele Lumber Co.....	4
Farrin, M. B., Lumber Company.....	12
Faust Bros. Lumber Co.....	16
Flanner-Steger Land & Lumber Co.	
Garetson-Greaseon Lumber Co.....	65
Hadentine Lumber Company, Inc....	1
Hamilton, J. V.....	64
Heyser, W. E., Lumber Company.....	11
Hill Brothers Tie & Lumber Co.....	10
Himmelberger-Harrison Lumber Co.	65
Hitt, H. H., Lumber Company.....	64
Holloway Hardwood Lumber Co.....	
Huddleston-Marsh Lumber Co.....	
Kent, J. S., Company.....	14
Kentucky Lumber Co.....	12
Keys-Walker Lumber Co.....	1
Kimball & Kopcke.....	6
Klann, E. H.....	53
Lamb-Fish Lumber Co.....	8
Litchfield, William E.....	14
Little River Lumber Company.....	16
Logan-Maphet Lumber Co.....	6
Long-Knight Lumber Company.....	6
Louisiana Long Leaf Lumber Co....	64
Louisville Point Lumber Company..	5
Love, Boyd & Co.....	7
Maley, Thompson & Moffett Co.....	11
Maphet & Shea Lumber Company...	6
McIlvain, J. Gibson, & Co.....	2
McLean, Hugh, Lumber Co.....	66
McParland Hardwood Lumber Co....	53
Miller, Anthony.....	66
Mowbray & Robinson.....	11
Norman Lumber Company.....	5
Ohio River Saw Mill Company.....	5
Osgood & Richardson.....	53
Paepoke-Leicht Lumber Company..	
Peytona Lumber Company, Inc.....	10
Radina, L. W., & Co.....	12
Ransom, J. B., & Co.....	7
Ritter, W. M., Lumber Company.....	68
Russe & Burgess, Inc.....	16
Salt Lick Lumber Company.....	65
Schultz, Holloway Co.....	4
Slaymaker, S. E. & Co.....	1

Smith, Fred D.....	53
Standard Hardwood Lumber Co.....	66
Stewart, I. N., & Brother.....	66
Stimson, J. V., & Co.....	64
Sullivan, T. & Co.....	66
Tennessee Hardwood Lumber Co....	7
Three States Lumber Company.....	49
Vestal Lumber & Manufacturing Co.	6
Vinke, J. & J.....	59
Von Platen Lumber Co.....	60
Webster Lumber Co., George.....	5
West Virginia Timber Company.....	10
Whiting, Wm. S.....	65
Whitmer, Wm. & Sons.....	14
Wiggin, H. D.....	15
Williams, Ichabod T., & Sons.....	1
Willson Bros. Lumber Company.....	14
Wistar, Underhill & Nixon.....	14
Wood-Mosaic Company.....	15
Wood, R. E., Lumber Company.....	15
Yeager, Orson E.....	66

Penrod Walnut & Veneer Co.....	61
Purcell, Frank.....	65
Rayner, J.....	4
Struthers Cooperage Company.....	58
Wiley, C. L.....	1
Williams, Ichabod T., & Sons.....	1

HARDWOOD FLOORING.

Beecher & Barr.....	14
Carrier Lumber & Mfg. Co.....	16
Cobbs & Mitchell, Inc.....	3
Eastman, S. L., Flooring Co.....	61
Farrin, M. B. Lumber Company.....	12
Forman, Thos., Company.....	60
Kerry & Hanson Flooring Co.....	60
Louisiana Long Leaf Lumber Co....	64
Mitchell Bros. Company.....	3
Robbins Lumber Co.....	59
Salt Lick Lumber Company.....	65
Stearns Salt & Lumber Company.....	8
Stephenson, I., Company, The.....	60
Webster Lumber Co., George.....	15
White, Wm. H. Co.....	68
Wilce, T., Company, The.....	4
Wisconsin Land & Lumber Co.....	60
Young, W. D., & Co.....	3

WOODWORKING MACHINERY.

Cadillac Machine Co.....	57
Defiance Machine Works, The.....	13
Elmes, Charles F., Engineering Wks.	13
Linderman Machine Co., The.....	67
Mershon, W. B., & Co.....	56
Phoenix Manufacturing Co.....	57
Saranac Machine Company.....	57
Smith, H. B., Machine Co.....	1
Steinmetz, C. M.....	15
Westinghouse Electric & Mfg. Co..	

LOGGING MACHINERY.

Baldwin Locomotive Wks.....	
Clyde Iron Works.....	55
Lidgerwood Mfg. Co.....	56
Russel Wheel & Foundry Co.....	

DRY KILNS AND BLOWERS.

Grand Rapids Veneer Works.....	56
Phila. Textile Mchry. Co.....	1

SAWS, KNIVES AND SUPPLIES.

Atkins, E. C., & Co.....	
Simonds Mfg. Co.....	

LUMBER INSURANCE.

Central Manufacturers' Mut. Ins. Co.	
Epperson, U. S.....	61
Indiana Lumbermen's Mut. Ins. Co.	61
Lumber Mutual Fire Insurance Co..	62
Lumbermen's Mutual Ins. Co.....	6
Lumbermen's Underwriting Alliance	
Lumber Underwriters.....	16
Pennsylvania Lumbermen's Mutual	
Fire Ins. Co.....	50
Rankin, Harry & Co.....	

TIMBER LANDS.

Lacey, James D., & Co.....	2
Spry, John C.....	4

MISCELLANEOUS.

American Freight Audit & Storage	
Company.....	16
Astoria Veneer Mills & Dock Co....	63
Childs, S. D., & Co.....	53
Durant-Dort Carriage Company.....	9
Elmes, Charles F., Engineering	
Works.....	13
Gerlach, The Peter, Company.....	53
Lumbermen's Credit Association.....	4
Mechanical Rubber Company.....	57
Struthers Cooperage Company.....	59
Tamms Silica Company.....	53
Tausau Advancement Association..	9
Westinghouse Electric & Mfg. Co..	

POPLAR.

Anderson-Tully Company.....	9
Atlantic Lumber Company.....	1
Farrin, M. B., Lumber Company.....	12
Faust Bros. Lumber Company.....	16
Hadentine Lumber Company, Inc....	1
Kentucky Lumber Company.....	12
Keys-Walker Lumber Company.....	1
Logan-Maphet Lumber Co.....	6
Maphet & Shea Lumber Company.....	6
Peytona Lumber Company, Inc.....	10
Radina, L. W., & Co.....	12
Ritter, W. M., Lumber Company.....	68
Vansant, Kitchen & Co.....	68
West Virginia Timber Company.....	10
Whiting, Wm. S.....	65
Wood, R. E., Lumber Company.....	15
Yellow Poplar Lumber Company.....	68

VENEERS AND PANELS.

Adams & Raymond Veneer Co.....	64
Ahnapee Veneer & Seating Co.....	62
Astoria Veneer Mills & Dock Co....	63
Cadillac Veneer Company.....	
Central Veneer Company.....	61
Gorham Brothers Company.....	62
Hanson-Turner Company.....	62
Hoffman Bros. Company.....	61
Huddleston-Marsh Lumber Co.....	7
Jarrell, B. C., & Co.....	61
Kentucky Veneer Works.....	61
Kiel Wooden Ware Company.....	62
Knoxville Veneer Company.....	6
Louisville Veneer Mills.....	5
Maley, Thompson & Moffett Co.....	11
Mengel, C. C. & Bro. Company.....	5
Ohio Veneer Company.....	11
Penrod Walnut & Veneer Co.....	61
Putnam Veneer and Lumber Co.....	63
Rayner, J.....	4
Radford-Portsmouth Veneer Co....	
Rice Veneer & Lumber Company.....	61
Southern Veneer Manufacturing	
Company.....	63
Underwood Veneer Company.....	63
Veneer Manufacturers' Company.....	
Walker Veneer & Panel Co.....	53
Wiley, C. L.....	1
Williams, Ichabod T., & Sons.....	1
Wisconsin Seating Company.....	62
Wood-Mosaic Company.....	15

MAHOGANY, WALNUT, ETC.

Astoria Veneer Mills & Dock Co....	63
Duhlmeier Brothers.....	12
Hamilton, J. V.....	64
Huddleston-Marsh Lumber Co.....	
Maley, Thompson & Moffett Co.....	11
Mengel, C. C. & Bro. Company.....	5
Palmer & Parker Co.....	14

CLASSIFIED ADVERTISEMENTS

Advertisements will be inserted in this section at the following rates:

For one insertion.....20c a line
For two insertions.....35c a line
For three insertions.....50c a line
For four insertions.....60c a line

Eight words of ordinary length make one line. Headings counts as two lines. No display except the headings can be admitted.

Remittances to accompany the order. No extra charges for copies of paper containing the advertisement.

EMPLOYEES WANTED

WANTED

Salesmen on our New Census publications. Splendid opportunity. Men making \$50 to \$75 per week. RAND, McNALLY & CO., Dept. B., Chicago, Ill.

WANTED

First-class band sawyer, about February 1. Must be familiar with sawing mahogany and quartered oak fitches.

Address "BOX 127," care HARDWOOD RECORD.

WANTED

An experienced Veneer Slicer operator. In replying give full information, by whom you have been employed; what kinds of wood you have cut, your age, married or single, and references. Address "BOX 121," care HARDWOOD RECORD.

EMPLOYMENT WANTED

WANTED—EMPLOYMENT

When you want a salesman for New York state territory, write us. We can supply you with a good man. EMPIRE STATE ASSOCIATION of Wholesale Lumber & Sash & Door Salesmen. Chas. Johnson, Sec'y, 96 Kirkland Rd., Rochester, N. Y.

TIMBER ESTIMATING

TIMBER ESTIMATES

Estimating Southern timber a specialty. Maps, detailed reports as to stand, quality and logging conditions. Have a few high-class properties for sale. Can furnish best references.

THOS. J. McDONALD,
East Tenn. Natl. Bank Bldg.,
Knoxville, Tenn.

WAGON STOCK WANTED

I AM IN THE MARKET FOR

75 to 100 cars of oak poles, bolsters, sand boards, eveners, and reaches; and hickory and maple axles. Will inspect at shipping point, and pay cash. E. B. BROWN, 372 Bayne St., Buffalo, N. Y.

LOGS WANTED

WANTED—BLACK WALNUT LOGS

We want hewed black walnut logs for export. 16 inches and upward in diameter. Terms cash. JOHN L. ALCOCK & CO., P. O. Box 994, Baltimore, Md.

WANTED—BLACK WALNUT LOGS

500 cars good black walnut logs, 10" and up in diameter, 6 ft. and up long. Will inspect at shipping point and pay cash.

GEO. W. HARTZELL, Dayton, Ohio.

WANTED—HARDWOOD LOGS

200,000 ft. 28" and up White Oak logs.
200,000 ft. 12" and up Walnut logs.
50,000 ft. 12" and up Cherry logs.
C. L. WILLEY, 2558 S. Robey St., Chicago.

TIMBER LANDS FOR SALE

VIRGINIA TIMBERLAND TO BE SOLD AT AUCTION JANUARY 10, 1913

Over 700 acres in Botetourt County, Va., about one mile from Compton's Switch, to be sold free and discharged from all liens and encumbrances, at the old lumber camp on the premises, Friday, January 10, 1913, at 3:30 p. m.

Property can be reached by N. & W. R. R. to Buchanan, Va., thence via C. & O. R. R. to Compton's Switch. A deposit of 10% cash or certified check to be made at time of sale. The property belongs to the American Coal & Lumber Corp., bankrupts, and is sold by order of the U. S. District court, subject to confirmation. For further particulars apply to

WILLIAM P. DAVIS, JR., Trustee,
1200 Betz Bldg., Philadelphia, Pa.

For the convenience of purchasers, bids will be received by the auctioneer, W. S. Greenway, in front of the Roanoke Court House, Roanoke, Va., on Friday, January 10, 1913, at 11:30 a. m., and the bids then made will be cried by the auctioneer at the sale on the premises in the afternoon; the auctioneer reserves the right to sell the property to the highest bidder on the premises.

FOR SALE—TWO HUNDRED MILLION

Feet stumpage hardwood; very fine proposition; on railroad western N. C. J. M. ASKEW, 79 Cumberland Ave., Asheville, N. C.

ARE YOU INTERESTED IN GUM and Red Oak?

I own in fee simple two small and carefully selected tracks of high-class gum and red oak stumpage. Will sell at price to make the buyer good money either as an investment or as an operating proposition.

Will deal with principals only. Address in confidence, "BOX 22," care HARDWOOD RECORD.

TIMBER LANDS WANTED

WANTED TO BUY

400 or 500 acres of good hardwood timberland, mostly oak and ash, suitable for bending purposes. Address

"BOX 125," care HARDWOOD RECORD.

TIMBER FOR SALE

FOR SALE—HARDWOOD TIMBER

6,118 acres in fee simple of virgin timber land having on it the following: Oak, 15 million feet; cypress, 12 million feet; gum, 12 million feet; pine, 10 million feet. This is located in North Louisiana and is fine timber. Address

"OWNER," care HARDWOOD RECORD.

LUMBER FOR SALE

FOR SALE THOROUGHLY DRY STOCK

8 cars 11" No. 1 common Plain White Oak.
1 car 1 " Poplar Board 9 to 12".
5 cars 11" No. 1 common Poplar.
2 cars 11" Clear saps Poplar.
4 cars 1 " No. 1 common Chestnut.
2 cars 11" firsts and seconds Chestnut.
10 cars 11" No. 1 common Chestnut.
3 cars 11" firsts and seconds Chestnut.
12 cars 11" No. 1 common Chestnut.

All of this stock is thoroughly seasoned, running good widths and standard lengths, and can be shipped immediately. Write or wire us for delivered prices. You will find them interesting. FULLERTON-POWELL HDWD. LBR. CO., South Bend, Ind.

FOR SALE

Cottonwood which will be cut during the next sixty days. About 200,000 feet of wagon boards, any widths or lengths, absolutely clear, high grade. Also about 200,000 feet of No. 1 common and better. Please let us have your best cash offer, f. o. b. Omaha. Address

"BOX 115," care HARDWOOD RECORD.

OAK, POPLAR, ASH

and all other hardwoods, in all grades and thicknesses, can be readily sold if advertised in the Wanted and For Sale section of HARDWOOD RECORD. If you have a large stock you want to sell try a few lines in this department and see what a lot of inquiries they will bring you.

FOR SALE

Car Curly Poplar, largely 4/4.
2 cars 4/4 No. 1 Common Poplar
3 cars 8/4 No. 2 Common Poplar
Address P. O. BOX 174, Hickory, N. C.

DIMENSION STOCK WANTED

WANTED—DIMENSION STOCK

Oak, plain and quartered; boards and squares. Also dogwood and persimmon.

INDIANA QUARTERED OAK CO.,
7 East 42d St., New York, N. Y.

LUMBER WANTED

WE SHOULD LIKE TO HEAR FROM

Any firms in a position to supply Poplar Electric Casings, and also from those in a position to supply Red Gum Veneers.

Address "BOX 122," care HARDWOOD RECORD.

WANTED AT ONCE

1 carload No. 1 Chestnut Poles 30' long, 7" diameter at top.

WEBB WOODFILL, Greensburg, Indiana.

WANTED

Five cars 1" No. 3 common chestnut.
DUHLMEIER BROTHERS, Cincinnati, O.

BUYERS OF HARDWOODS.

Do you want to get in touch with the best buyers of hardwood lumber? We have a list, showing the annual requirements in lumber, dimension stock and veneers and panels of consumers of those materials throughout the United States and Canada. The service is free to advertisers in the RECORD. It will interest you. Write us for further information about our "Selling Lumber by Mail System."

HARDWOOD RECORD, Ellsworth Bldg.,
Chicago.

BUSINESS OPPORTUNITIES**EXPORT**

Well-known export firm, thoroughly acquainted with the European markets, would like to get into connections with first-class mills, especially in West Virginia, with the object of handling their stock for export. Principal will spend most time in Europe. Can furnish A1 references. Address "BOX 123," care HARDWOOD RECORD.

EXCELLENT OPPORTUNITY

for man to go in manufacturing business. Have well-equipped hardwood factory suitable for making spokes and vehicle stock. Healthy location in town six thousand, on two rivers and two railroads. Address

"BOX 72," care HARDWOOD RECORD.

RECEIVER'S SALE

Well-equipped Furniture Factory, now in operation, together with large stock of finished and unfinished furniture in course of manufacture; about 300,000 feet of seasoned lumber; good three-story brick factory and warehouse buildings; 50,000 square feet floor space; good railroad facilities, sawmill in connection; skilled non-union labor; established trade; splendid opportunity. Will be offered at private sale by order of court, Thursday, Jan. 16, 1913. For information address A. B. WYCOFF, Receiver, Batesville, Ind.

PARTNERSHIP INTEREST FOR SALE

Non-resident partner in Hardwood Manufacturing company will dispose of controlling interest.

Address "BOX 120," care HARDWOOD RECORD.

WANTED

To correspond with a reliable and competent manufacturer of hardwood lumber, who has a mill and wants a location in the Gulf states.
Address ROBINSON LUMBER CO.,
717 Whitney Bank Bldg., New Orleans, La.

MACHINERY FOR SALE**FOR SALE AT A BARGAIN**

One Coe 76"x52" Veneer Lathe.
One Coe 76" Veneer Clipper.
One 76" S. C. Rogers Buffalo Knife Grinder.
All machinery guaranteed to do first-class work, and good reasons for wanting to sell. Address "BOX 116," care HARDWOOD RECORD.

MACHINERY WANTED**WANTED TO BUY**

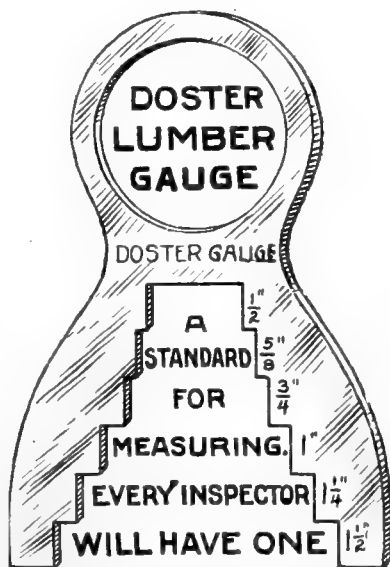
one hundred and eight dry kiln bunks, six feet long, six inch wheels, roller bearings.
THE TAYLOR CHAIR CO., Bedford, O.

MISCELLANEOUS**WANTED—HARDWOOD LUMBERMEN—**

to try the Gibson Tally Book. The three-throw aluminum tally ticket cover accommodates any form of ticket desired. The use of the special triplicate tally ticket supplied, printed on water-proof paper with carbon backs makes tallies unalterable. For durability, convenience, accuracy and for systematizing the inspection of lumber the Gibson tally method can't be beat.

Special forms of tally tickets mailed on application. Covers sold on approval to responsible concerns.

HARDWOOD RECORD,
537 So. Dearborn St., Chicago.



For sale by HARDWOOD RECORD,
537 S. Dearborn St., Chicago, Ill.
50 CENTS EACH.

CHICAGO

Telephone Canal 1688

CHAS. DARLING & CO.
HARDWOOD LUMBER
22nd Street and Center Avenue
CHICAGO

McParland Hardwood
Lumber Co. 2204 S. Laflin St.
HARDWOODS

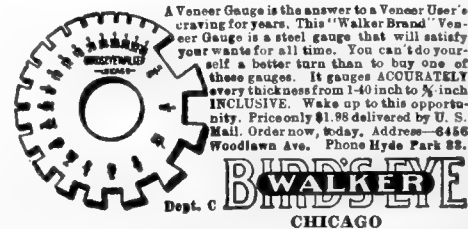
FRED D. SMITH
HARDWOOD LUMBER
1337-1343 North Branch St. CHICAGO

E. H. KLANN
Cottonwood, Gum, Oak, Ash, Cypress, Yellow Pine, Dimension Stock
819 FISHER BLDG. HAR. 1187

Osgood & Richardson
935 Peoples Gas Bldg.

NORTHERN AND SOUTHERN
HARDWOODS

Chicago Agents: LAMB-FISH LUMBER CO.



99% PURE
SILICA
OR SILEX FOR WOOD FILLERS
TAMMS SILICA CO., 19 So. 5th Ave., Chicago

COUNTERFEIT CHECKS

are frequent
except where
our

Two Piece
Geometrical
Barter Coin
is in use, then
imitation isn't
possible.
Sample if you
ask for it.

S. D. CHILDS
& CO.
Chicago

We also make
Time Checks,
Stencils and
Log Hammers.



Gerlach Modern Machines
Produce the Cheapest and Best
COOPERAGE STOCK
and **BOX SHOOKS**
Circular, Band and Cylinder Saws
SAW AND LOG TOOLS
THE PETER GERLACH CO., Cleveland, 6th City, U.S.A.

This is Form Y

Y G. M. CC. FAT. 1. 1. 01

Elkmont Contracting & Supply Co.

Elkmont, Tenn.

Camp

191

DIA.	8	10	12	14	16		DIA.	8	10	12	14	16	TOTAL
8							37						
9							38						
10							39						
11							40						
12							41						
13							42						
14							43						
15							44						
16							45						
17							46						
18							47						
19							48						
20							49						
21							50						
22							51						
23							52						
24							53						
25							54						
26							55						
27							56						
28													
29													
30													
31													
32													
33													
34													
35													
36													
Total													
TOTAL NO. LOGS & AM'T. IN FEET													
CARS — AVERAGE PER CAR													

REMARKS:

SCALER

Of Single Duplicate or Tripli-
cate Log Tally Ticket (with-
out Loose Carbon Sheets)
used in the

Gibson Aluminum Tally Book Covers

MANUFACTURED BY
HARDWOOD RECORD
537 S. Dearborn Street
CHICAGO

Let us send you catalogue and
price list of scores of forms of
lumber, flooring and log tally
tickets.

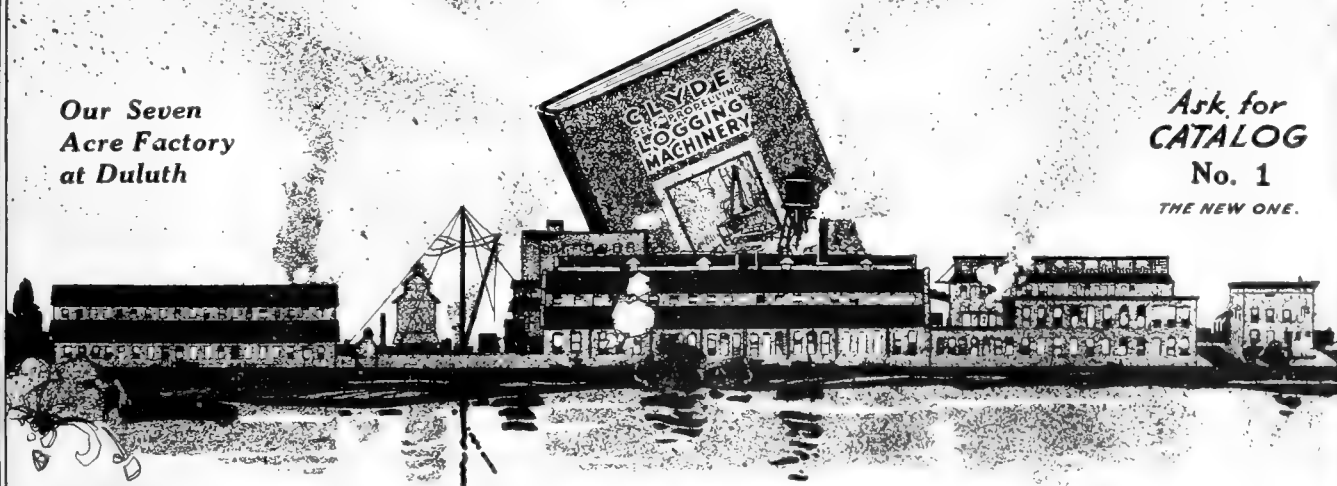
The Gibson Tally Book System
has more than 2,500 users.

"CLYDE-GRADE Than which there is None better."

Nearly a thousand lumber companies have proved the economy and efficiency of skidding with the Clyde Skidder and loading with the McGiffert Log Loader. If you are not one of them you will be after you give us a chance to show you; and meantime it's costing you somewhere around \$25 a day to "do without!"

*Our Seven
Acre Factory
at Duluth*

*Ask for
CATALOG
No. 1
THE NEW ONE.*



CLYDE IRON WORKS
Manufacturers at DULUTH, Minnesota, U.S.A. of
CLYDE-GRADE Logging and Hoisting Machinery.



The CHEAPEST HARDWOOD LOGGING

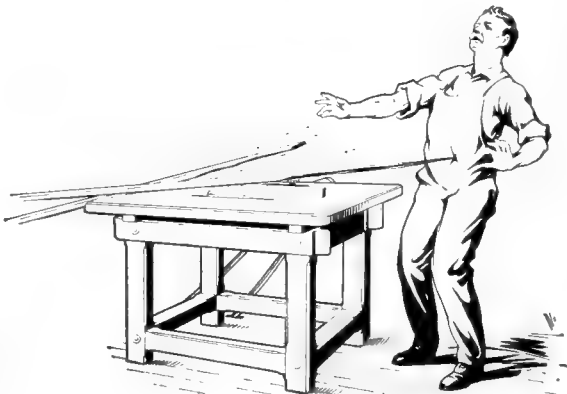
IS DONE WITH

LIDGERWOOD CABLEWAY SKIDDERS



LIDGERWOOD MFG. CO.
96 Liberty Street, New York

Branch Offices
CHICAGO SEATTLE
Agencies
NEW ORLEANS-WOODWARD, WIGHT & CO. LTD.
CANADA-ALLIS CHALMERS BULLOCK LTD.
MONTREAL VANCOUVER



Dangerous Circular Ripsaws.

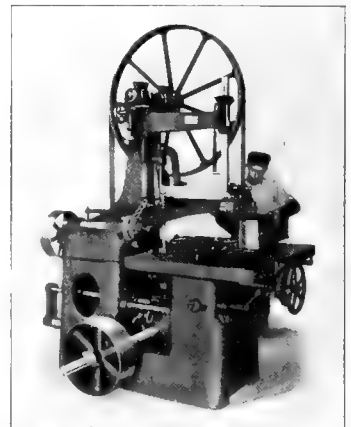
Avoid Liability

And risks of maiming
your employees. Use
our Power Feed Band
Ripsaw

A Specially Not a Side Line

WM. B. MERSHON & CO.

SAGINAW, MICHIGAN



Power Feed Band Ripsaw No. 1.

You can't afford to be without **The Gibson Tally Book**

when it costs but a dollar, if you want the most convenient and accurate system for tallying lumber.

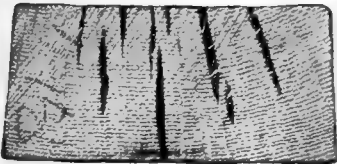
Hardwood Record :: :: Chicago

MORE THAN 2,000 LUMBERMEN

are using the new Gibson Tally Book with its duplicate or triplicate tally tickets. If you haven't seen it, let us send you one with specimen tickets on approval. They solve your shortage and inspection troubles.

HARDWOOD RECORD

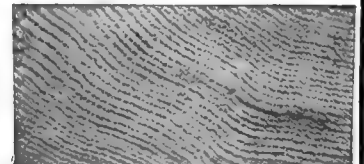
CHICAGO



Lumber Dried As Never Before

SEE THE DIFFERENCE

GRAND RAPIDS DRY KILN
GRAND RAPIDS VENEER WKS., SOLE MFRS., MICHIGAN

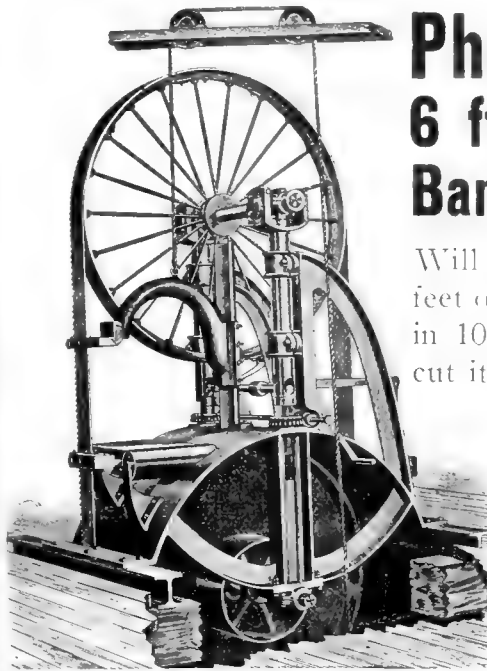


If you want to reach the wholesale consumers of hardwood lumber throughout the United States, a HARDWOOD RECORD advertisement will do it for you.

If you want to reach the hardwood manufacturers of the United States, a HARDWOOD RECORD advertisement will do it for you.

The HARDWOOD RECORD represents high-class, special, class circulation, with a minimum of waste circulation.

Ask any HARDWOOD RECORD advertiser for experience on results.



Phoenix 6 ft. Pony Band Mill

Will cut 30,000
feet of 1" lumber
in 10 hours and
cut it good.

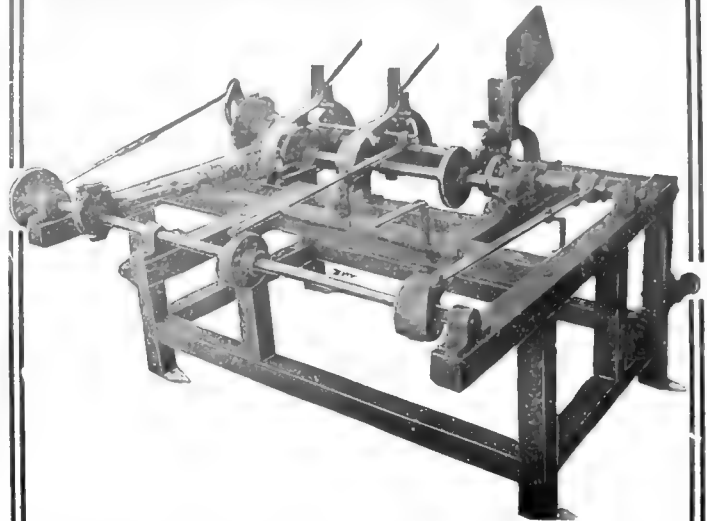
Nearly 200
of these
mills sawing
wood in the
U. S. A.

PRETTY GOOD
RECOMMEN-
DATION, ISN'T IT?

MODERATE PRICE

PHOENIX MFG. CO.
EAU CLAIRE WISCONSIN

Broom Handle CHUCKING AND BORING MACHINE



It rounds end of handle and bores small hole in other end automatically at same time. Capacity, 45,000 handles in ten hours. All the operator has to do is to keep the handles fed to the machine. Used by the largest producers. Write for details and price.

CADILLAC MACHINE CO.
Makers of Handle Makers Tools. CADILLAC, MICHIGAN

Corrugated Joint Fasteners

Can be quickly and
cheaply driven with

"ADVANCE" CORRUGATED JOINT FASTENER MACHINE

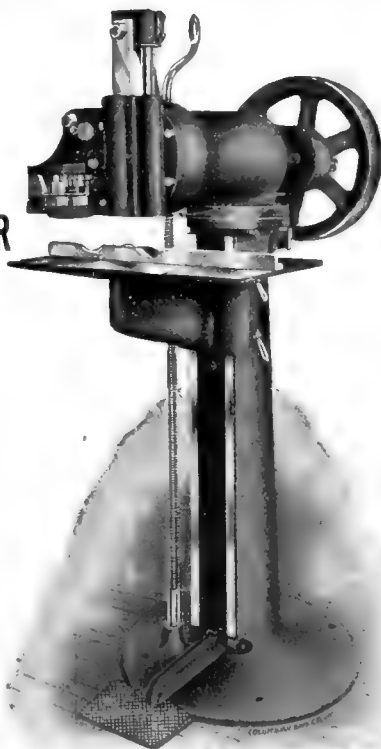
Made in Different
Types to Meet
All Conditions.

Specially suitable for
manufacturers of
sash, doors, blinds,
screens, coffins,
furniture, plumbers'
wood-work, porch
columns, boxes,
refrigerators, etc.

Write for bulletins
and prices.

Manufactured only
by

Saranac Machine Co., St. Joseph, Michigan



**ELEPHANT
RUBBER**

BELTING

AIR DRILL AND AIR TOOL

HOSE

STEAM
WATER
SUCTION

EXTRA QUALITY

Recommended for hard service
and guaranteed to do the work

SELLING AGENTS

CRANE COMPANY - ALL BRANCHES
STANDARD EQUIPMENT CO., MOBILE, ALA
ALBANY MILL SUPPLY CO., ALBANY, GA.

**THE MECHANICAL
RUBBER COMPANY**

(Chicago Rubber Works)

307 W. Randolph Street,
ESTABLISHED 1882

CHICAGO



500 Copies Sold Within a Week After Prospectus Was Issued

Hardwood Record announces the issue on January 1,
1913, of an Authoritative Commercial and Scientific Book

American Forest Trees

By Henry H. Gibson, Editor Hardwood Record
Edited by Hu Maxwell, Wood Utilization Expert

The Work Involves :

First: A botanical description of the more than 300 species of American forest tree growth.

Second: A physical description of the wood of these species.

Third: A recital of the chief uses of all important American woods, together with suggestions of advantageously broadening their uses.

Fourth: Complete information concerning the range of growth of all varieties.

Fifth: Related trees are logically grouped according to families and spe-

cies; important species covered in substantial detail, and brief mention of the woods of minor importance.

Sixth: Scientific name of each tree is recited, as well as the various common names by which it is recognized in different parts of its range of growth.

Seventh: The properties of the various woods are carefully analyzed, particularly weight, hardness, stiffness, strength, elasticity, toughness, color, figure, and seasoning and lasting properties.

¶ The book will contain between 650 and 750 pages, will be printed on the best quality of enameled paper, and handsomely bound in half leather, dark green roan back and corners, with basket cloth sides, silk head-bands, gold stamping on the back, and gilt top.

¶ The work will be illustrated with more than 100 full-page pictures on plate paper in sepia, outlined in orange, from photographs, covering all the chief commercial varieties of virgin forest timber growing in the United States; and also with numerous engravings, from drawings and photographs, showing leaf and flower forms, etc.

¶ The price of the work is \$6.00, delivered by express or mail, and is sold only on subscription.

¶ An order blank, and a prospectus, showing the character of the paper, size of page and style of printing will be forwarded on application.

Address Book Department, HARDWOOD RECORD

537 South Dearborn Street

Chicago, Illinois

ORDERS SHOULD BE PLACED AT ONCE



WISCONSIN



WHERE THE FINEST NORTHERN HARDWOODS GROW

SAWYER GOODMAN CO.

MARINETTE, WIS.

Mixed Cars of Hardwood, Bass-
wood, White Pine and Hemlock,
Cedar Shingles and Posts

We make a specialty of White Pine Beveled Siding and
White Pine Finish and Shop and Pattern Lumber

We want to move the following air-seasoned stock

5 cars 6/4" No. 2 Com. & Better Birch
3 cars 5/4" No. 2 Com. & Better Birch
1 car 8/4" No. 2 Com. & Better Birch
1 car 8/4" No. 1 Com. & Better Birch
3 cars 4/4" No. 1 Com. Birch
2 cars 4/4" No. 2 Com. Birch

OELHAFEN LUMBER CO.

TOMAHAWK, WISCONSIN

"Three Mills in Indiana" Used to Be the
Slogan. Now There's Only One Left, but It's

The Largest Band Mill in Indiana

"From Toothpicks to
Timbers 60 Feet Long"

PERRINE-ARMSTRONG COMPANY

Fort Wayne, Indiana

"WE ARE GETTING RESULTS"
WRITES ONE ADVERTISER

This Means That He Is Getting

NEW BUSINESS

Through His Ad

If we can do it for him is there any logical
reason why we can't for you?

MAKE US PROVE IT

HARDWOOD RECORD, CHICAGO

WE MANUFACTURE MICHIGAN
HARDWOODS AND HEMLOCK.
MILLS ELECTRICALLY
DRIVEN; STOCK
BAND SAWN

Have in Shipping Condition

BIRCH: NO. 2 AND BETTER, 4/4 to 12/4
ASH: NO. 2 AND BETTER, 4/4 to 12/4
ELM: NO. 2 AND BETTER, 4/4 to 12/4
BASSWOOD: NO. 2 AND BETTER, 4/4
to 12/4

WE are well equipped for manufacturing
special sizes, wagon stock, skids, ties, etc.

THE C. A. GOODYEAR LUMBER COMPANY
Office and Mill Logging Camp
TOMAH, WISCONSIN BLUE BILL, MICHIGAN

GET OUR PRICES ON

1 car 1" No. 1 Common & Btr. Red Birch.
10 cars 1" No. 2 Common & Btr. Plain Birch.
5 cars 1" No. 1 and No. 2 Common Plain Birch.
2 cars 1 1/4" No. 2 Common & Btr. Plain Birch.
2 cars 1 1/2" No. 2 Common Plain Birch.

Can ship in straight or
mixed cars with other lumber

ROBBINS LUMBER COMPANY

Rhineland, Wisconsin

For Prompt Shipment

Basswood—100,000 ft. 5 1/4 No. 2 Common & Better.
Soft Maple—25,000 ft. 4 1/4 & 8 1/4 Log Run M. C. O.
White & Red Oak—12,000 ft. Log Run M. C. O.
Black Walnut—3,000 ft. Log Run M. C. O.

STRUTHERS COOPERAGE CO., Romeo, Michigan

J. & J. VINKE

Agents for the Sale of

AMERICAN HARDWOODS IN LUMBER AND LOGS
AMSTERDAM, HOLLAND



MICHIGAN



FAMOUS FOR HARD MAPLE AND GREY ELM

"Ideal" Steel Burnished Rock Maple Flooring

is the flooring that is manufactured expressly to supply the demand for the best. It is made by modern machinery from carefully-selected stock and every precaution is taken throughout our entire system to make it fulfill in every particular its name—"IDEAL."

ROUGH OR FINISHED LUMBER—ALL KINDS

Send Us Your Inquiries

The I. Stephenson Company - WELLS, MICHIGAN

We Want to Move Promptly

20 cars 4 4 No. 2 Com. and Better Basswood
12 cars 5/4 No. 2 Com. and Better Basswood
50 M 2x6-16 small red knotted White Pine
25 M 4/4 Log Run White Pine

LATH
SHINGLESMICHIGAN
HARDWOODSPINE AND
HEMLOCK

East Jordan Lumber Co.

East Jordan, Michigan

MAKERS OF IMPERIAL MAPLE FLOORING

Michigan
Hard Maple
Firsts and
Seconds

150 M' 5/4

45 M' 8/4

25 M' 10/4

60 M' 12/4

40 M' 16/4

Stock now in our
Detroit yard for
quick shipment.

20 M' 5/4 14" and wider

10 M' 6/4 12" and wider

10 M' 10/4 12" and wider

12 M' 12/4 12" and wider

10 M' 16/4 12" and wider

PRICES REASONABLE, AND GRADES CORRECT

Thomas Forman Company

Detroit

IXL ROCK MAPLE

Birch and
Selected Red Birch

FLOORING

*"The Standard" of Excellence*

Wisconsin Land & Lumber Company

Hermansville, Michigan

BIRCH, ASH, ELM, BASSWOOD AND HEMLOCK LUMBER
Basswood Siding, Ceiling, and Moulding

Von Platen Lumber Co.

Iron Mountain, Michigan

MANUFACTURERS OF

BIRCH BASSWOOD ELM MAPLE

5/4 No. 1 and 2 Common Maple..... 75,000 ft.

6/4 No. 1 Common Maple..... 150,000 ft.

4/4 No. 1 Common Birch..... 100,000 ft.

4/4 No. 2 Common Birch..... 50,000 ft.

5/4 No. 2 Common and Better Birch..... 50,000 ft.

8/4 No. 3 Common Rock Elm..... 40,000 ft.

We Solicit Your Inquiries

SHIPMENTS VIA C. & N. W.—C., M. & ST. P.—W. & M.

SALLING, HANSON CO.

MANUFACTURERS OF

Michigan Hardwoods

GRAYLING, MICHIGAN

"Chief Brand" Maple and Beech Flooring

in 3, 5 and 13-16 and 1 1-16 inch Maple
in all standard widths and grades, will
commend itself to you and your trade
on its merits alone

WRITE US, WE CAN INTEREST YOU

Kerry & Hanson Flooring Co.

GRAYLING, MICHIGAN

VENEERS AND PANELS

The Central Veneer Co.

**SOFT YELLOW POPLAR
CROSS BANDING**

Huntington, West Virginia

B. C. JARRELL & CO.

MANUFACTURERS OF

Rotary-Cut Gum and Poplar

VENEERS

Well manufactured, thoroughly
KILN DRIED and FLAT

HUMBOLDT, - TENNESSEE

KANSAS CITY, MO.

HELENA, ARK.

VENEERS

PENROD WALNUT & VENEER COMPANY

General Offices, KANSAS CITY, MO.

Hoffman Brothers Company

**Sliced and Sawed, Quartered
and Plain Red and
White Oak**

Walnut Cherry Ash Maple

Let us Send You Our Stock List **FORT WAYNE, IND.**

KENTUCKY VENEER WORKS

ROTARY CUT SAWED AND SLICED
GUM, POPLAR, OAK QUARTERED OAK, MAHOGANY
LOUISVILLE, KENTUCKY

S. L. EASTMAN FLOORING CO.

SAGINAW BRAND

MAPLE FLOORING

SAGINAW, MICH.

CIRCIASSIAN

MAHOGANY

Logs VENEERS Lumber

WE IMPORT

WE MANUFACTURE

All Thicknesses of Mahogany
Ready for Shipment

RICE VENEER & LUMBER CO.
GRAND RAPIDS, MICH.

For Veneer and Panel Manufacturers

Your Consumers' Lists Cost You BIG MONEY

We can save it all and relieve you of all the detail and effort necessary to tabulate consumers' wants. **Our Card Index System** of those wants, just out, is the result of systematic effort. It is endorsed by your competitor.

Can You Afford to Give Him that Advantage?

HARDWOOD RECORD

CHICAGO

veneers AND PANELS

Ahnapee Veneer & Seating Co.

HOME OFFICE, FACTORY AND VENEER MILL, ALGOMA, WIS.
VENEER AND SAWMILL, BIRCHWOOD, WIS.

We manufacture at our Birchwood plant single ply veneers of all native northern woods and deliver stock that is in shape to glue.

From our Algoma factory, where we have specialized for twenty years, we produce panels of all sizes, flat or bent to shape, in all woods, notably in Mahogany and Quarter-Sawed Oak.

We make no two-ply stock, and do not employ sliced cut quartered oak. Our quartered oak panels are all from sawed veneer.

Every pound of glue we use is guaranteed hide stock. We do not use retainers. Our gluing forms are put under powerful screws and left until the glue has thoroughly set.

If you seek a guaranteed product that is the best, based on results accomplished by most painstaking attention and study of every detail, combined with the use of the best stock and an up-to-date equipment, our product will appeal to you.

If you are a "price buyer" we probably cannot interest you.

KIEL WOODEN WARE CO.

WHEN IN THE MARKET FOR ROTARY CUT

BIRCH
BASSWOOD
OAK
ASH
ELM

VENEER

Write Us

WISCONSIN

KIEL
FACTORY AND MAIN
OFFICE

MELLEN
VENEER AND HEADING
MILL

EXTRA!

MUST MOVE BY JAN. 1

EXTRA!

Panels—3 ply—good 1 side

3/16 Ash, 24x60 1/4 Ash, 24x60 1/4 Basswood, 24x60
30x60 30x72

IN STOCK AT CHICAGO WAREHOUSE, 1140 WEST LAKE STREET
TELEPHONE HAYMARKET 3027

Wisconsin Seating Co.

New London, Wis.

HOWARD HANSON, President

THOMAS A. TURNER, Secy. and Treas.

THE HANSON-TURNER COMPANY

MANUFACTURERS OF

ROTARY CUT VENEER AND THIN LUMBER

ELM
BEECH
CURLY BIRCH

OAK
MAPLE

BIRCH
BASSWOOD
BIRD'S-EYE MAPLE

SPECIALTIES:

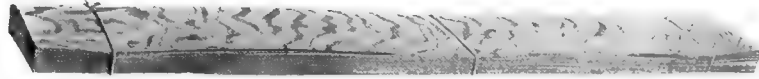
DRAWER BOTTOMS BACK PANELS CENTER STOCK
BACKING PIANO PIN BLOCKS BIRCH DOOR STOCK
CURLY BIRCH BIRD'S-EYE MAPLE

OFFICE and FACTORY at WELLS, N. Y.

VENEERS AND PANELS

OUR SPECIALTY

Highly Figured Quarter-Sawed White Oak Veneer



PUTNAM VENEER & LUMBER CO.
ROACHDALE, IND.

H. I. CUTSINGER, Gen'l Mgr.

Custom Mill Work, Storage, Inspection

ON

Foreign Fancy Woods, Mahogany, Cedar, Circassian

We receive the logs, store or warehouse them, manufacture them into lumber, cut or saw veneers, pile and store the product, and ship via any railroad. Also furnish inspection returns on logs or lumber. Can furnish accommodations and economies which it is impossible to secure elsewhere. We always have on our yards parcels of plain and figured African, Mexican and Cuban Mahogany, Circassian Walnut and Cedar logs, placed here for sale by direct foreign shippers, from which advantageous purchases can be made.

Astoria Veneer Mills & Dock Co.

Long Island City, New York

Veneers and Panels with a Reputation

WE manufacture Veneers in all the native woods and for all purposes. Also Built-up Panels in native and foreign woods—three and five-ply—and have established a reputation for furnishing high-grade material. Send us your inquiries and orders and become one of our satisfied customers.

Underwood Veneer Co.

Wausau, Wis.

“SOVEMANCO.”

We can furnish anything you want in

Sawed and Sliced Foreign and Domestic Figured Veneers

Capacity 15 million feet per year. Ready to take care of carload orders promptly. Small orders shipped same day received, if desired.

SOUTHERN VENEER MFG. CO., Inc.

Office, 21st and Standard.

LOUISVILLE, KY.

Mills, Magnolia, Standard and 21st Sts.

THE SOUTH

PROMINENT SOUTHERN MANUFACTURERS

ANY REASONABLE OFFER

WILL BUY THE FOLLOWING STOCK:
DRY—IN FINE CONDITION

6,000 ft. 3/4" 1s-2s Qrtd. White Oak, 6" & up.	5,000 ft. 5/4" No. 2 Com. Qrtd. White Oak.	20,000 ft. 6/4" 1s-2s Qrtd. Red Oak, 6" & up.
8,500 ft. 3/4" No. 1 Com. Qrtd. White Oak, 6" & 7".	5,700 ft. 2 1/4" Com. & Bet. Plain White Oak.	15,000 ft. 8/4" 1s-2s Qrtd. Red Oak, 6" & up. Very wide run.
5,000 ft. 6/4" No. 1 Com. Qrtd. White Oak.	35,000 ft. 4/4" No. 2 Com. Red & White Oak.	17,000 ft. 4/4" 1s-2s Qrtd. Poplar.
2,700 ft. 5/8" No. 2 Com. Qrtd. White Oak.	40,000 ft. 4/4" 1s-2s Qrtd. Red Oak, 6" & up.	7,500 ft. 4/4" 1s-2s Yel. Poplar, 7" & up wide.
35,000 ft. 4/4" No. 2 Com. Qrtd. White Oak.	15,000 ft. 5/4" 1s-2s Qrtd. Red Oak, 6" & up.	13,000 ft. 5/4" Com. & Bet. Poplar, 13" & up.
		26,000 ft. 6/4" Clear Saps. Good widths and lengths.
		38,000 ft. 6/4" No. 1 Common. Good widths and lengths.

We, of course, have a complete stock of Quartered and Plain Oak, Poplar and Hickory, etc., in all grades and thicknesses; and will be glad to have your inquiries for anything you may need.

J. V. STIMSON & CO.

OWENSBORO, KY.

Louisiana Long Leaf Lumber Co.

Fisher, Louisiana

Diamond



Brand

OAK FLOORING

A GUARANTEE OF PERFECTION

PUT US ON YOUR GUM MAP

In the next ninety days, our mills
will cut about 3,000,000 feet

RED and SAP GUM

H. H. HITT LUMBER COMPANY

MANUFACTURERS

TENNESSEE VALLEY HARDWOODS
DECATUR, ALABAMA



ESTABLISHED 1869

Adams & Raymond
Veneer Co.
INDIANAPOLIS, INDIANA
MANUFACTURERS
OF
PLAIN & FIGURED
VENEERS
CIRCASSIAN } WALNUT
AMERICAN }
QUARTERED OAK

ANY THICKNESSES

IF YOU HAVEN'T SEEN THE GIBSON TALLY BOOK

Let us send you one on approval, with samples of Tally Tickets for triplicate, duplicate or single tallies—a score of forms to choose from. They are the latest and best. Endorsed by hundreds of lumber manufacturers and buyers.

HARDWOOD RECORD

CHICAGO

THE SOUTH

PROMINENT SOUTHERN MANUFACTURERS

William S. Whiting

MANUFACTURER AND WHOLESALE

WHITE PINE
BASSWOOD
BIRCH
BUCKEYE
CHESTNUT
MAPLE
POPLAR
OAK

ASHEVILLE, N. C.

Salt Lick Lumber Co.

SALT LICK

KENTUCKY

MANUFACTURERS OF



Oak Flooring

Complete stock of $\frac{3}{8}$ " and $\frac{13}{16}$ " in all standard widths

WE HAVE IT

W. W. DEMPSEY

Manufacturer and
Wholesaler of

HARDWOODS

BAND SAWED STOCK

A LINE BRINGS PRICE BY RETURN MAIL

General Offices
Johnstown, Pa.

New York Office
No. 18 Broadway

CHERRY
50 M ft. 4/4
No. 3
Common

CHESTNUT
100,000 feet
of 8/4 Sound
Wormy and
No. 2 Com-
mon.

CYPRESS
250,000 feet
of 4/4 No. 1
Common &
Better, Old
grading.

SPRUCE
4/4 and 8/4
Clear and
Select, 8/4
Box and Mill
Cull

A FEW ITEMS OF DRY STOCK

We Want to Move

2 cars 4/4 1st & 2nds Cypress.
2 cars 4/4 select Cypress.
4 cars 4/4 No. 1 Shop Cypress.
1 car 2" 1sts & 2nds Cypress.
1 car 2" Select Cypress.
1 car 4/4 1sts & 2nds Cotton-
wood.
5 cars 3" mixed oak Crossing
Plank.

10 cars 4/4 1sts & 2nds Red Gum.
2 cars 5/4 No. 1 Common Ash.
2 cars 4/4 1sts & 2nds Ash.
1 car 2" 1sts & 2nds Ash.
2 cars 4 4 18" & wider Panel
Cottonwood.
8/4 to 16/4 No. 1 Common and
better Plain Red and White
Oak.

BAKER-MATTHEWS MFG. CO.

SIKESTON, MO.

WRITE US FOR PRICES

GARETSON-GREASON LUMBER CO.

1002-1005 Times Bldg.

ST. LOUIS

MANUFACTURERS

Three Mills

Frank Purcell

Kansas City
U. S. A.

Exporter of Black Walnut Logs



MARK

FIGURED WALNUT IN LONG WOOD
AND STUMPS

D. B. MacLaren Lumber Co.

HARDWOOD LUMBER

Evansville, Ind.

5 cars 4/4 No. 1 common Quartered White Oak
4 cars 4/4 No. 1 common Plain Red Oak
2 cars 4/4 No. 2 common Plain Red Oak
1 car 4/4 No. 1 common Poplar
1 car 4/4 Nos. 1 and 2 Red Gum

Himmelberger-Harrison Lumber Co.

Specialists Red Gum

Mills at
Morehouse, Mo.

Sales Offices
Cape Girardeau, Mo.

BUFFALO

The Foremost Hardwood Market of the East

BUFFALO HARDWOOD LUMBER CO.

We want to buy for cash

OAK, ASH AND OTHER HARDWOODS

All grades and thicknesses.
Will receive and inspect stock at shipping point.
Branch yard, Memphis, Tenn.

940 Seneca Street,

BUFFALO

T. SULLIVAN & CO.

SPECIALTIES:

Gray Elm, Brown Ash

Pacific Coast Fir and Spruce

2 ARTHUR STREET

ORSON E. YEAGER

SPECIALTIES:

Oak, Ash and Poplar

932 ELK STREET

ANTHONY MILLER

**HARDWOODS
OF ALL KINDS**

893 EAGLE STREET

G. ELIAS & BRO.

HARDWOODS

White Pine, Yellow Pine, Spruce,
Hemlock, Fir, Lumber, Timber, Mill-
work, Boxes, Maple and Oak Flooring

955-1015 ELK STREET

Hugh McLean Lumber Co.

OUR SPECIALTY:

**QUARTERED
WHITE OAK**

940 ELK STREET

I. N. Stewart & Bro.

Specialties

Cherry and Oak

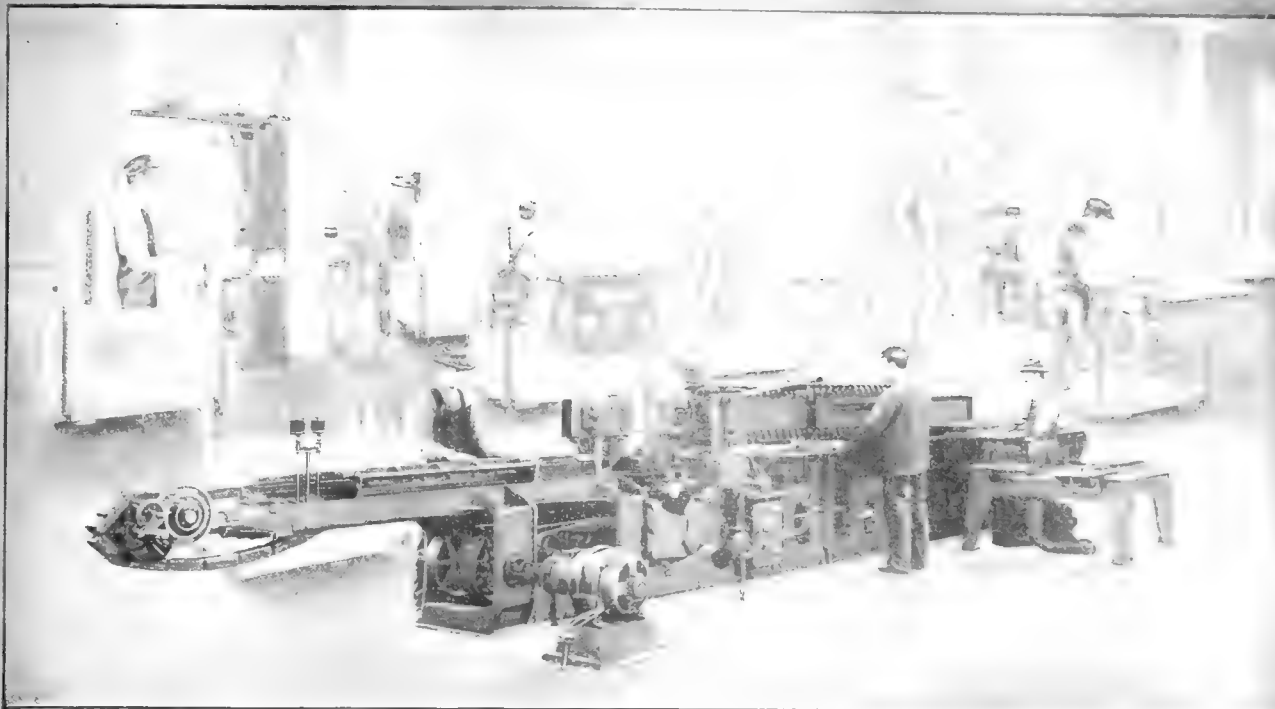
892 Elk Street

Standard Hardwood Lumber Co.

**OAK, ASH and
CHESTNUT**

1075 Clinton Street

The above firms carry large and well assorted stocks of all kinds and grades of Hardwoods, and have every facility for filling and shipping orders promptly. They will be pleased to have your inquiries.



Automatic Jointing

The Greatest Improvement in Producing Furniture

A few manufacturers who have made a success of Automatic Jointing.

J. K. Rishel Co.
Standard Furniture Co.
Rockford Cabinet Co.
Haddorf Piano Co.
S. Karpen & Bros.
Steger & Sons.
Grand Rapids Refrigerator Co.
Shaw-Walker Co.
Naperville Lounge Co.
Cutler Desk Co.
Gunn Furniture Co.
Mier & Pohlman Co.
National Casket Co.
Kertscher Co.
C. B. Atkin & Co.
Acme Kitchen Furniture Co.
Weber Co.
S. K. Pierce Co.
P. Derby Co.
Cramer Furniture Co.
Standard Red Cedar Chest Co.
Singer Manufacturing Co.
Brunswick-Balke-Collender Co.
J. C. Wideman & Co.
American Seating Co.
Irving & Casson.
Wood & Brooks.
Binghampton Lounge Co.
W. W. Putman Co.
B. F. Huntley Furn Co.

The joints which you make are perhaps satisfactory, but are you satisfied with a method that takes several operations to do the same work that can be done on the

"Linderman" Automatic Dovetail Glue Jointer

which joints lumber together and builds panels up to any width desired without lumber waste, on one machine and at one automatic operation, offering an improvement in cost reductions with as perfect a glue joint as can be made by any method?

Three Hundred and Fifty Manufacturers Now Use the "Linderman"

with more than satisfactory results as to economy and quality; no matter how many men you use in your jointing department, you pay them from \$400.00 to \$700.00 each per year. With the "Linderman" in your factory the labor cost would be reduced more than one-half and your yearly labor costs would be reduced to \$200.00 to \$400.00 per man.

Taper Wedge Joints Are Thoroughly Glued

because when the joint begins to slide together there is a 16-in. opening. The glue is not forced out but forced into the wood—the Tapered Dovetail then permanently clamps the boards together.

The names of some of the users here represent practically every line of jointing and the automatic method means a big saving in these factories in labor, lumber and glue.

Saving Edge Waste

The new feeding fence is a very important feature in saving lumber. Rough edge lumber can be jointed, saving the ripping, the saw kerf and edge waste. Can we send you leaflets explaining this feature with others?

Linderman Machine Company

Muskegon, Mich.

New York City

Woodstock, Ontario

St. Louis, Mo.

Atlanta, Ga.

Vansant,

Manufacturers Old-Fashioned

5-8 and 4-4
in Wide Stock,
Specialty

Kitchen &

Soft
Yellow
Poplar

Ashland, Kentucky

Company

EASTERN REPRESENTATIVE, John L. Cochran
601 W. 115th Street, New York City

CHICAGO OFFICE, Steger Building
W. H. Matthias, Manager.

HERE IS SOME OF THE STOCK WE HAVE ON HAND FOR PROMPT SHIPMENT:

BASSWOOD

4/4 1s and 2s, 10'-12', 2 cars.
4/4 1s and 2s, 14'-16', 1 car.
4/4 Clear strips, 10'-12', 1 car.
4/4 Clear strips, 14'-16', 1 car.
4/4 No. 1 Common, 10'-12', 2 cars.
4/4 No. 1 Common, 14'-16', 3 cars.

CHESTNUT

4/4 No. 1 Common, 5 cars.
5/4 No. 1 Common, 2 cars.
6/4 No. 1 Common, 3 cars.
8/4 No. 1 Common, 2 cars.
4/4 Quartered No. 2 Com., 5 cars.
8/4 No. 2 Common, 2 cars.

10/4 No. 2 Common, 2 cars.
12/4 No. 2 Common, 3 cars.
4/4 No. 1 Com. strips, 3 cars.

FLOORING

Oak, Beech and Maple.

WHITE PINE

All grades.

ALL BAND SAWED AND OUR OWN MANUFACTURE

W. M. RITTER LUMBER CO., COLUMBUS, OHIO

W. H. White Company Boyne City Lumber Company

Mills and General Office: BOYNE CITY, MICH.

Sales Office: BUFFALO, N. Y.

WE OFFER

4/4 and 5/4 No. 2 common and better
Basswood

4/4 No. 2 common and better Brown
Ash

4/4 and 5/4 No. 2 common and better
Birch, strictly unselected for color

4/4 and 5/4 No. 1 and No. 2 common
Flooring Maple.

4/4, 5/4, 6/4, 8/4, 10/4, 12/4 and 16/4
Firsts and Seconds Maple

STOCK DRY—STANDARD GRADES—BEST
MANUFACTURE—CAR OR CARGO SHIPMENTS

YELLOW POPLAR

MANUFACTURERS OF BAND SAWED

POPLAR
QUARTERED OAK
PLAIN OAK
CHESTNUT
BASSWOOD



SPECIALTY
QUARTER SAWED
WHITE OAK

Coal Grove, Ohio, U. S. A.

LUMBER CO.

Aardwood Record

Eighteenth Year, {
Semi-Monthly. }

CHICAGO, JANUARY 10, 1913

{ Subscription \$2.
{ Single Copies, 10 Cents.



Special Woods— for Special Work

With an organization that maintains yards in the heart of the best lumber districts, we are in a position to fill your orders for practically any size, grade, or kind of wood—and we are not too big to appreciate only the larger orders.

When you have Special Work—remember that you can get the Special Wood, delivered promptly and at the right price, from

J. GIBSON McILVAIN & Co.
1420 Chestnut Street **Philadelphia, Pa.**

HOLLOWAY HARDWOODS

*The following Yellow Cottonwood
is band-sawn and runs*

60% 14' and 16'

COTTONWOOD

176,850 feet 4/4 1st & 2nd 6" to 12".

89,432 feet 4/4 1st & 2nd 13" & wider.

163,421 feet 4/4 No. 1 Common, containing all the wide.

Holloway Hardwood Lumber Co.
20 W. Jackson Blvd. Chicago

ELEPHANT RUBBER BELTING

AIR DRILL AND AIR TOOL

HOSE

**STEAM
WATER
SUCTION**

EXTRA QUALITY

Recommended for hard service
and guaranteed to do the work



SELLING AGENTS

CRANE COMPANY • ALL BRANCHES
 STANDARD EQUIPMENT CO., MOBILE, ALA
 ALBANY MILL SUPPLY CO., ALBANY, GA.

**THE MECHANICAL
RUBBER COMPANY**

(Chicago Rubber Works)

**307 W. Randolph Street,
ESTABLISHED 1882**

CHICAGO

MICHIGAN

FAMOUS FOR HARD MAPLE AND GREY ELM

Michigan Hardwoods

MANUFACTURED BY

COBBS & MITCHELL, Inc.

CADILLAC, MICH.

November 26th, 1912

DRY STOCK LIST

4/4 Basswood No. 1 Common.....	100 M
4/4 Birch 1s & 2s Red Curly and Wavy.....	15 M
4/4 Cherry No. 3 Common & Better.....	9 M
4/4 Cadillac Gray Elm 1s & 2s.....	20 M
4/4 Cadillac Gray Elm No. 1 Common.....	47 M
4/4 Cadillac Gray Elm No. 2 Common.....	60 M

"It is not what lumber costs you, so much as what you can get out of it, that decides its value for your work."

OUR OWN MANUFACTURE

Something New For Your Factory Floors

Utility Joined With Economy

We are now manufacturing what we call a No. 2 Factory grade of Hardwood Flooring which can be used successfully in factory buildings where good wearing qualities rather than appearance are required. This Flooring is made from the hardest portion of the log, and while the Flooring shows the heart defect to a considerable extent, nevertheless it will wear with wonderful durability. It is "Rockhard" flooring at a rock bottom price.

It is 13/16 x 2 1/4" face, and the Flooring is kiln dried, hollow backed, bored, end matched, steel scraped and bundled.

Write us about it. This is a grade of Hardwood Flooring you should know about. Address MITCHELL BROTHERS COMPANY, Sales Department, CADILLAC, MICHIGAN.

W. D. YOUNG & CO.

MANUFACTURERS

FINEST MAPLE FLOORING

KILN DRIED, HOLLOW BACKED
MATCHED OR JOINTED
POLISHED AND BUNDLED

Hard Maple, Beech and Birch Lumber

1 TO 6 INCHES THICK WRITE FOR PRICES
BAY CITY, :: MICHIGAN

THE Kneeland-Bigelow Co.

300,000 Feet

5/4 No. 2 Common and Better Beech

HARDWOOD MANUFACTURERS

250,000 ft. 5/4 No. 1 Common Basswood

This is of good average widths and lengths, containing a large percentage of 16 ft.

All of the above stock is nicely manufactured, being hand sawed, trimmed, and well seasoned. We are prepared to quote attractive prices for this material for immediate shipment.

BAY CITY, MICH.



FLANNER-STEGER LAND & LUMBER CO. MAPLE AND BIRCH FLOORING

of unexcelled manufacture and quality. Also Manufacturers of Basswood, Birch, Elm, Maple and Hemlock.

SEND US YOUR INQUIRIES

MILLS:
BLACKWELL, WISCONSIN

GENERAL SALES OFFICE
1704 STEGER BLDG., CHICAGO, ILL.

HARDWOOD AND YELLOW PINE LUMBER

***In Stock, Ready
To Ship***

3 cars 1x6 and wider 1st & 2nd Cottonwood
3 cars 1x9 to 12" Cottonwood Box Boards
4 cars 1" No. 1 Common Cottonwood
4 cars 1" No. 1 Common Sap Gum

WE make
a spe-
cialty of Oak
Timber and
Car Stock.

WRITE US FOR PRICES ON YELLOW PINE TIMBER, FLOORING, CEILING AND FINISHING.
SCHULTZ, HOLLOWAY CO., 343 South Dearborn Street, CHICAGO

If you want to reach the wholesale consumers of hardwood lumber throughout the United States, a HARDWOOD RECORD advertisement will do it for you.

If you want to reach the hardwood manufacturers of the United States, a HARDWOOD RECORD advertisement will do it for you.

The HARDWOOD RECORD represents high-class, special, class circulation, with a minimum of waste circulation.

Ask any HARDWOOD RECORD advertiser for experience on results.

CHICAGO

THE GREATEST HARDWOOD MARKET IN THE WORLD

HUDDLESTON-MARSH LUMBER COMPANY

(Successors in Chicago to OTIS MANUFACTURING CO.)

2254 LUMBER STREET, CHICAGO

Mahogany Lumber

Mexican and Cuban. 1s
& 2s, No. 1 Com., Shorts.
All thicknesses. Plain and
Figured.

Mahogany Veneer

Mexican and African.
Sawed and sliced. All
thicknesses. Figured and
Plain.

Circassian Walnut Lumber and Veneer.

Qtd. R. & W. Oak Veneer Plain R. & W. Oak Veneer
BIRCH, GUM, POPLAR, AND BASSWOOD VENEER

ALL IN OUR CHICAGO YARD.
PROMPT SHIPMENT ASSURED.

J. RAYNER VENEERED PANELS

ALL WOODS
SEND FOR STOCK LIST

MAHOGANY LUMBER

CARROLL AVE. AND SHELDON ST.
CHICAGO

We Have Made a Success of the Veneer Business—

Why?

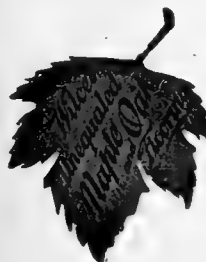
Because no permanent money-making
proposition can be one-sided and we
are benefiting our customers

Let us have your inquiries when in the market
for the following woods:

MAHOGANY YELLOW POPLAR
CIRCASSIAN PINE
CURLY BIRCH R.C. Red & Wh. Oak
WALNUT BUTTS R. C. Birch
And QUARTERED OAK, Sawn and Sliced

Veneer Manufacturers Company
Fulton and May Streets, Chicago, Ill.

A floor to adore



For thirty-three years Wilce's Hardwood Floor-
ing has been among the foremost on the market
and because it stands today "unequaled" is the
best evidence that its manufacturer has kept
abreast of modern methods and the advanced de-
mands of the trade. To convince yourself of the
above statements, try our polished surface floor-
ing, tongued and grooved, hollow backed, with
matched ends and holes for blind nailing—you'll
find it reduces the expense of laying and polishing.
Our Booklet tells all about Hardwood Flooring
and how to care for it—also prices—and is free.

The T. Wilce Company

22nd and Throop Sts. CHICAGO, ILL.

Estabrook-Skeele Lumber Co.

MANUFACTURERS AND DEALERS IN

Maple, Birch, Elm, Basswood, Ash
And Other Northern Hardwoods

In the Market for Round Lots of Hardwood

WRITE US BEFORE SELLING

Fisher Building, CHICAGO

'PHONE HARRISON 1984

SAVE YOUR MONEY BY USING THE

RED BOOK

Published Semi-annually
in February and August

It contains a carefully prepared list of the buyers of lumber in
car lots, both among the dealers and manufacturers.

The book indicates their financial standing and manner of meet-
ing obligations. Covers the United States, Alberta, Mani-
toba and Saskatchewan. The trade recognizes this book as
the authority on the lines it covers.

A well organized Collection Department is also operated and the same is open to
you. Write for terms.

Lumbermen's Credit Assn., ESTABLISHED 1874

608 So. Dearborn St.
CHICAGO

Mention This Paper.

116 Nassau Street
NEW YORK CITY

Going up—Hardwood Timber

We have the following hardwood and pine timber for sale at prices
that have not as yet been advanced with the rise in value on
timber lands. For a short time we offer—

150,000,000 FEET HARDWOOD IN SOUTHEAST
ARKANSAS—A SPLENDID OPPORTUNITY.

7,600,000 FEET OF HARDWOOD IN SOUTH-
WEST ARKANSAS

We also have timber in British Columbia and on the Pacific Coast
and Oregon.

For further particulars, address

John C. Spry

Room 1003 Harris Trust Bldg.,

Chicago, Illinois

KNOXVILLE

Famous for Finest Type of Poplar, Oak and Chestnut

VESTAL LUMBER AND MANUFACTURING CO. KNOXVILLE, TENNESSEE.

QUARTERED WHITE OAK OUR SPECIALTY

MANUFACTURERS OF
QUARTERED WHITE OAK, PLAIN OAK, POPLAR, WALNUT & TENNESSEE RED CEDAR LUMBER
BAND MILLS AT VESTAL, A SUBURB OF KNOXVILLE. SOUTHERN AND LOUISVILLE & NASHVILLE RAILROAD

H. S. MIZNER,
Pres.

C. C. CANNON,
Vice-Pres.

J. M. LOGAN,
Gen'l Manager

C. R. SWANN,
Sec'y and Treas.

J. M. LOGAN LUMBER CO.

MANUFACTURERS AND WHOLESALERS
HARDWOODS AND PINE
POPLAR A SPECIALTY

Main Office and Yards: Knoxville

Branch Office and Yard:

Bank and McLean Ave., Cincinnati I. M. ASHER, Mgr.

We Want Orders for the following Dry Stock:
WHITE OAK—Plain or Quartered.

RED OAK—Plain or Quartered.

CHESTNUT

BASSWOOD

POPLAR

WHITE PINE

Always carry large well
assorted stock of all
kinds of Hardwoods.

CAN SHIP ON SHORT NOTICE.

Maphet & Shea Lumber Co.

Manufacturers and Wholesalers

OFFICE: 703-705 HENSON BUILDING

Yard: Middlebrook Pike and
Lonsdale Car Line

KNOXVILLE, TENN.

WE WANT TO MOVE

3 cars 4/4 No. 1 Common Poplar, 7" & up
2 cars 4/4 Clear Sap Poplar, 7" & up
1 car 4/4 Select Poplar, 7" & up
1 car 4/4 1 & 2 Red Oak, 10" & up
1 car 4/4 1 & 2 Chestnut
1 car 4/4 No. 1 Common Chestnut

We manufacture: YELLOW POPLAR,
OAK, CHESTNUT, WHITE AND YEL-
LOW PINE, HEMLOCK BARK, ETC.

BAND AND CIRCULAR MILLS—EAST TENN.
MOUNTAIN VIRGIN HARDWOOD STUMPAGE

"THE VERY BEST" Red Birch

Knoxville Veneer Co.

P. B. RAYMOND, General Manager, Knoxville, Tenn.

Kimball & Kopcke Knoxville, Tennessee

Manufacturers and Shippers of

Appalachian Hardwoods

OAK OUR SPECIALTY

NASHVILLE

CELEBRATED FOR HIGHEST TYPE TIMBER GROWTH, FAULTLESS
MANUFACTURE AND GOOD GRADES.

If you want to get in touch with 2000 Live Wire Buyers of Hardwoods

it will pay you to find out about
the Hardwood Record's

BULLETIN SERVICE

One man, who uses the service
gives it credit for earning annu-
ally \$10,000 for him.

Write for pamphlet—

"Selling Lumber By Mail"

It will prove a revelation to you.

HARDWOOD RECORD

(Bulletin Dept.)

537 So. Dearborn St.,
CHICAGO

We will name very attractive
prices on a few cars of each of the
following items:

4 4, 6/4, 10 4 and 12 4 1s and 2s Poplar
4/4 and 8/4 Sap Poplar.
1 1/4", 1 1/2" and 2 1/2" No. 1 Common Poplar.
4 4 No. 1 and Panel Poplar in widths of 12 to 17", 18 to 23"
and 24" and up.
4 4 x 13 to 17" Poplar Box Boards.
4 4 1s & 2s Basswood or Linn—very fine.
3/8, 4/4, 5/4, 10/4 and 12/4 1s & 2s Qtd. W. Oak.
4/4, 5/4, 6/4 and 8/4 No. 1 Common Qtd. W. Oak.
6/4 1s & 2s Qtd. R. Oak.
4/4, 5/4 and 6/4 No. 1 Common Qtd. R. Oak.
6/4 and 10/4 1s & 2s Hickory.
4/4, 6/4, 10/4 and 12/4 No. 1 Common Hickory.
4/4, 6/4, 8/4, 10/4 and 12/4 No. 2 Common Hickory.
4/4 1s & 2s Chestnut, also 5, 6 and 8/4.
4/4 No. 1 Common Chestnut.

John B. Ransom & Co.

MANUFACTURERS OF

Hardwood Lumber

Nashville, Tenn.

IF YOU BUY LUMBER

Naturally you want only well manufactured stock, clean
grades and prompt service. We can give you all three.

We have a well assorted stock of Plain and
Quartered Red and White Oak, Poplar, Ash,
Chestnut, Hickory and Aromatic Tennessee
Red Cedar, practically all of which is our
own manufacture.

LOVE, BOYD & CO., Nashville, Tenn.

Cherokee Lumber Co.

Manufacturers of all the lumber we sell.


Let us quote you some attractive prices
on quartered white oak and poplar.
Any grades and thicknesses.

NASHVILLE, TENN.

Tennessee Hardwoods

Tennessee Hardwood
Lumber Co.

West Nashville

 The Gibson Aluminum Tally Book Cover
and Tally Tickets are now employed by
more than 2,000 lumber manufacturers,
dealers and consumers.

Paepcke Leicht Lumber Company

CHICAGO

Southern Hardwoods

☐ We offer stock, produced by our band mills, from our own timber.

☐ We control absolutely the manufacture, piling, grading and shipping of our product and are thus able to assure our trade of uniformity of grades and manufacture.

SPECIALTIES:

RED GUM
SAP GUM

RED OAK
WHITE OAK

COTTONWOOD
YELLOW CYPRESS

SOFT ELM
WHITE ASH

Paepcke Leicht Lumber Company

CHICAGO

LAMB-FISH LUMBER CO.



Band Mill and General Offices

CHARLESTON,

MISS.

**THE LARGEST HARDWOOD MILL IN THE WORLD
ANNUAL CAPACITY, 40,000,000**

STOCK LIST—Dry Lumber on Hand January 1, 1913

TELEGRAPH
CODES
UNIVERSAL
HARDWOOD
WESTERN UNION
Cable Address, Lamb

	3/8	1/2	5/8	3/4	4/4	5/4	6/4	8/4	10/4	12/4	16/4
FAS Quartered White Oak.....	6,000	60,000	20,000	30,000	30,000	25,000	7,000	.....	.....	.....	.....
No. 1 Com. Quartered White Oak.....	.....	12,000	.....	16,000	150,000	.....	.....	.....	.....	.....	.....
No. 2 Com. Quartered White Oak.....	.....	5,000	.....	.....	10,000	.....	.....	.....	.....	.....	.....
FAS Plain White Oak.....	30,000	100,000	20,000	.....	.....	40,000	.....	.....	3,000	.....	2,000
No. 1 Com. Plain White Oak.....	.....	.....	40,000	12,000	150,000	5,000	.....	3,000	9,000	.....	.....
FAS Plain White Oak 12" & up.....	.....	.....	.....	4,000	.....	.....	.....	.....	.....	.....	.....
FAS Plain Red Oak.....	.....	.....	30,000	20,000	150,000	.....	.....	.....	.....	.....	1,000
No. 1 Com. Plain Red Oak.....	.....	.....	18,000	25,000	50,000	.....	18,000	1,000	.....	.....	.....
Com. & Better Qrtd. Red Gum.....	.....	.....	.....	.....	50,000	.....	.....	.....	.....	.....	.....
FAS Red Gum—Plain.....	200,000	150,000	110,000	250,000	220,000	40,000	60,000	40,000	.....	3,000	.....
FAS Circassian Red Gum.....	.....	.....	.....	12,000	20,000	.....	3,000	1,000	.....	.....	.....
No. 1 Com. Red Gum.....	60,000	20,000	130,000	40,000	50,000	50,000	20,000	8,000	.....	.....	.....
FAS Sap Gum 18" & Up.....	.....	.....	.....	.....	80,000	.....	.....	.....	.....	.....	.....
FAS Sap Gum 6" & up.....	100,000	40,000	20,000	50,000	.....	15,000	20,000	10,000	.....	.....	.....
No. 1 Com. Sap Gum.....	.....	.....	100,000	150,000	200,000	40,000	.....	.....	.....	.....	.....
No. 2 Com. Sap Gum.....	50,000	30,000	25,000	100,000	.....	200,000	15,000	.....	.....	.....	.....
Shop & Better Cypress.....	.....	.....	.....	.....	15,000	.....	.....	30,000	.....	.....	.....
Common & Better Tupelo.....	.....	.....	.....	.....	40,000	.....	.....	.....	.....	.....	.....

OUR LUMBER CONTAINS ALL WIDE STOCK PRODUCED IN MANUFACTURING AND WILL RUN OVER 50% OF 14 AND 16 FT. LENGTHS. WE ALSO MANUFACTURE OAK TIMBERS AND BRIDGE PLANK—FACILITIES FOR KILN DRYING AND DRESSING

"STEARN'S" QUALITY LUDINGTON

HARDWOOD SPECIALISTS

RESOLVED: That it shall be our aim to gain as many satisfied customers as we have during the past year, and that we will maintain the high standard of manufacture—quality—grades and service established.

OUR INVENTORY SPECIALS

- | | |
|--|--|
| 5 cars 4/4 No. 1 Com. & Btr. Cross Piled Sap Hard Maple. | 1 car 8 1/4 1sts & 2nds Hard Maple Step Plank. |
| 3 " 5/4 End Dried Sap Hard Maple. | 1 " 10/4 No. 1 Com. & Btr. Soft Grey Elm. |
| 2 " 6/4 End Dried Sap Hard Maple. | 2 cars 6 1/4 No. 1 Common Soft Grey Elm. |
| 1 car 6/4 1sts & 2nds Hard Maple Step Plank. | 3 " 6/4 No. 2 Common Soft Grey Elm. |

YOU CAN READ QUALITY BETWEEN THE LINES

The **STEARN'S**
SALT & LUMBER CO. LUDINGTON, MICH.

BAND SAWN HARDWOODS

WE PRODUCE OUR OWN STOCKS

OAK—Plain and Quartered, Red and White

COTTONWOOD—Ash, Southern Elm, Gum, Soft Maple

A FEW ITEMS WE WANT TO MOVE:

- 100,000 feet 5/4" x 13" to 17" 1sts & 2nds Cottonwood.
- 110,000 feet 4/4" x 22" & up No. 1 & Panel Cottonwood.
- 200,000 feet 4/4" x 13" to 17" Cottonwood Box Boards.
- 75,000 feet 4/4" 1sts & 2nds Quartered White Oak.
- 97,000 feet 4/4" No. 1 Common Quartered White Oak.
- 115,000 feet 4/4" 1sts & 2nds Red Gum.
- 200,000 feet 4/4" to 8/4" No. 1 Shop & Better Cypress.

WRITE US FOR PRICES

ANDERSON-TULLY COMPANY
HARDWOOD LUMBER **Memphis, Tenn.**



CHARLESTON, W. VA.

2 cars 6'4" Common & Better
Chestnut.

2 cars 4'4" 1sts & 2nds Cypress.

5 cars 4'4" 1sts & 2nds Red Gum.

5 cars 4'4" No. 1 Common Red Gum.

5 cars 4'4" 1sts & 2nds Sap Gum.

KENTUCKY LUMBER COMPANY

Manufacturers

CINCINNATI, OHIO

OFFER AS SPECIALS

28 M. ft. 5/8" Panel Poplar.
40 M. ft. 4'4" Panel Poplar.
100 M. ft. 4'4" 1s & 2s Poplar.
50 M. ft. 5'4" 1s & 2s Poplar.
200 M. ft. 4'4" Select Poplar.
30 M. ft. 5'4" Select Poplar.
100 M. ft. 4'4" Moulding Poplar.

150 M. ft. 4'4" No. 1 Com. & Better
Chestnut.
50 M. ft. 6'4" Cull Ash.
40 M. ft. 6'4" No. 1 Com. Plain
Oak.
50 M. ft. 4'4" Wormy Oak.
100 M. ft. 4'4" No. 1 Com. & Better
Red Gum.

It's Still a Bull Market!

Every buyer likes to take advantage of whatever opportunities happen to be offered for getting bargains in materials.

The attitude of the user of any commodity is naturally bearish—because it's to his interest to be so. He wants prices to decline, and the wish being father of the thought, according to some noted genealogical authorities, he proceeds to think that quotations are due for a slump.

This is just a little hint to remind the buyer who is temperamentally bearish that the signs are all ag'in him just now. Prices at this present moment are not high; in fact, on some items, considering the intrinsic value of the wood and its manufacturing cost, they are particularly low, and this stock would make a good buy for anybody, be he wholesaler or consumer.

The mills have had some good weather during the past few months, and have piled up considerable lumber. But consumption is running ahead so fast that this incidental increase in production is merely an anchor to windward, a kind of safety valve for the outlet of any particularly rapid development of business. It is certainly not enough to justify any idea as to lower prices.

Talk to people in other lines, from pig iron to dry goods, and you'll find that everybody is busy, and everybody's buying. That means firm market conditions, with the tendencies constantly upward. Hence our tip, based on conditions which anyone can analyze for himself, is to buy.

Incidentally, just remember that the best place to go for hardwoods, including special orders, mixed cars and veneers and panels, is Louisville. Address

The Louisville Hardwood Club

EDWARD L. DAVIS LUMBER COMPANY
BOOKER-CECIL COMPANY
W. P. BROWN & SONS LUMBER COMPANY
NORMAN LUMBER COMPANY
(Mill at Holly Ridge, La.)

LOUISVILLE POINT LUMBER COMPANY
OHIO RIVER SAWMILL COMPANY
THE LOUISVILLE VENEER MILLS
C. C. MENGEL & BRO. CO.

500 Copies Sold Within a Week After Prospectus Was Issued

Hardwood Record announces the issue on February 1, 1913, of an Authoritative Commercial and Scientific Book

American Forest Trees

By Henry H. Gibson, Editor Hardwood Record
Edited by Hu Maxwell, Wood Utilization Expert

The Work Involves :

First: A botanical description of the more than 300 species of American forest tree growth.

Second: A physical description of the wood of these species.

Third: A recital of the chief uses of all important American woods, together with suggestions of advantageously broadening their uses.

Fourth: Complete information concerning the range of growth of all varieties.

Fifth: Related trees are logically grouped according to families and spe-

cies; important species covered in substantial detail, and brief mention of the woods of minor importance.

Sixth: Scientific name of each tree is recited, as well as the various common names by which it is recognized in different parts of its range of growth.

Seventh: The properties of the various woods are carefully analyzed, particularly weight, hardness, stiffness, strength, elasticity, toughness, color, figure, and seasoning and lasting properties.

¶ The book will contain between 650 and 750 pages, will be printed on the best quality of enameled paper, and handsomely bound in half leather, dark green roan back and corners, with basket cloth sides, silk head-bands, gold stamping on the back, and gilt top.

¶ The work will be illustrated with more than 100 full-page pictures on plate paper in sepia, outlined in orange, from photographs, covering all the chief commercial varieties of virgin forest timber growing in the United States; and also with numerous engravings, from drawings and photographs, showing leaf and flower forms, etc.

¶ The price of the work is \$6.00, delivered by express or mail, and is sold only on subscription.

¶ An order blank, and a prospectus, showing the character of the paper, size of page and style of printing will be forwarded on application.

Address Book Department, HARDWOOD RECORD

537 South Dearborn Street

Chicago, Illinois

ORDERS SHOULD BE PLACED AT ONCE

CINCINNATI

THE GATEWAY OF THE SOUTH

BENNETT & WITTE

We are going to move the following lot of high grade Lumber during the next few weeks

2 cars 4/4" 1 & 2 Red Gum, 18" to 27" wide.	2 cars 4/4" Cottonwood Box Bds., 3" up.
3 cars 4/4" No. 1 Com. Qrtd. Red Oak.	2 cars 4/4" 1 & 2 Poplar.
3 cars 4/4" No. 1 Com. Qrtd. White Oak.	1 car each 12/4" No. 1 Com. Selects & 1 & 2 Poplar.
1 car 12/4" 1 & 2 Plain White Oak.	1 car 4/4" 5/4" & 6/4" 1 & 2 Ash, 12" & up wide.
2 cars 5/8" No. 2 Com. Plain Oak.	1 car 8/4", 10/4", 12/4" & 16/4" 1 & 2 Ash, 12" up wide.

Main Office
CINCINNATI, OHIO

SOUTHERN OFFICE, MEMPHIS, TENN.
EXPORT OFFICE, NEW ORLEANS, LA.

W. E. HEYSER, President WEAVER HASS, V. President
BENJAMIN BRAMLAGE, Sec'y & Treas.

The W. E. Heyser Lumber Company

MAIN OFFICE & YARDS
Winton Place
Cincinnati, Ohio

BRANCH YARDS AND MILLS
West Virginia, Mississippi, Arkansas & Kentucky

12,000,000 ft. High Grade West Virginia and Southern Hardwoods in stock at all times.	Shipments made direct from our own yards and mills in straight or mixed cars.
---	---

SEND US YOUR INQUIRIES

MOWBRAY & ROBINSON

SPECIALISTS IN

OAK—ASH—POPLAR

ALWAYS IN THE MARKET FOR
ROUND LOTS OR MILL CUTS

OFFICE AND YARDS
SIXTH ST., BELOW HARRIET

CINCINNATI

The Maley, Thompson
& Moffett Co.

Veneers, Mahogany and Hardwood Lumber

Largest Stocks

Best Selections

CINCINNATI, OHIO

L. W. RADINA & CO.

DEALERS IN

POPLAR AND HARDWOODS

CINCINNATI : : OHIO

ARE YOU ALIVE

to the "Service" (in all its details) you can secure from us on Oak, Gum, Poplar and other Hardwoods?

BETTER GET IN TOUCH WITH US

THE M. B. FARRIN LUMBER CO.
CINCINNATI, OHIO

WE WANT TO BUY

1", 1 1/4", 1 1/2" 1s & 2s AND NO. 1 COMMON SAP GUM
1", 1 1/2" & 2" 1s & 2s AND NO. 1 COMMON RED GUM
1" NO. 1 COMMON TUPELO.

SUBMIT US YOUR STOCK SHEETS
WITH BEST CASH PRICES

DUHLMEIER BROS.
CINCINNATI, OHIO

THE EAST

BOSTON

NEW YORK

PHILADELPHIA

WM. WHITMER & SONS
INCORPORATED

Manufacturers and Wholesale-
sellers of All Kinds of

"If Anybody Can,
We Can"

HARDWOODS

West Virginia Spruce and Hemlock
Long and Short Leaf Pine Virginia Framing

Franklin Bank Bldg.

PHILADELPHIA

Willson Bros. Lumber Co.

MANUFACTURERS

WEST VIRGINIA HARDWOODS

Oliver Building

PITTSBURG, PA.

H. D. WIGGIN 89 STATE STREET
BOSTON, MASS.

MANUFACTURER HARDWOOD LUMBER

Circular-sawed Poplar, Oak, Chestnut, Basswood, Maple
Mill at Stone Coal Junction, West Virginia

We Know How to fill your orders for all kinds of **HARD-**
WOODS, WHITE PINE, YELLOW PINE,
SPRUCE, HEMLOCK, CYPRESS, HARDWOOD FLOORING.
Give us a trial.

THOMAS E. COALE LUMBER COMPANY
FRANKLIN BANK BUILDING, PHILADELPHIA, PA.

WHITE OAK } 6x6 to 12x12
BILL TIMBERS } 10 to 20 ft.
ALSO BRIDGE PLANK

J. S. KENT COMPANY PHILADELPHIA

FOR QUICK 1 car 4 1/4 1s and 2s Red Oak, 14 & 16' long, 16" & up wide
SHIPMENT 1 car 4 1/4 1s and 2s Red Oak, 10 & 12' long, 16" & up wide
1 car 4 1/4 Common and Better Quarter Sawed Red Oak.
4 cars each 5/4, 6/4 and 8/4 No. 2 and S. W. Chestnut.
1 car 4/4 No. 1 Common Chestnut.
1 car 4/4 1s and 2s Chestnut.

Send Your Inquiries to
DANIEL B. CURLL, Real Estate Trust Bldg., PHILADELPHIA

PALMER & PARKER CO.

TEAK **MAHOGANY** EBONY
ENGLISH OAK **DOMESTIC**
CIRCASSIAN WALNUT **veneers** **HARDWOODS**
103 Medford Street, Charlestown Dist.
BOSTON, MASS.

BEECHER & BARR

OAK **CHESTNUT** **POPLAR**
WHITE PINE, YELLOW PINE AND HEMLOCK
INTERIOR TRIM. HARDWOOD FLOORING.
442 LAND TITLE BLDG. PHILADELPHIA, PA.

WISTAR, UNDERHILL & NIXON

REAL ESTATE TRUST BUILDING, PHILADELPHIA, PA.

QUARTERED WHITE OAK

NICE FLAKY STUFF

WM. E. LITCHFIELD

MASON BUILDING, BOSTON, MASS.

Specialist in Hardwoods

Manufacturers are requested to supply lists of stock for sale

IF YOU HAVEN'T SEEN THE GIBSON TALLY BOOK

Let us send you one on approval, with samples of Tally Tickets for triplicate, duplicate or single tallies—a score of forms to choose from. They are the latest and best. Endorsed by hundreds of lumber manufacturers and buyers.

HARDWOOD RECORD

CHICAGO

THE EAST

LEADING MANUFACTURERS AND JOBBERS

LET us talk to you about the plain and quartered oak that made Indiana famous. It's the kind we make to-day.

Wood-Mosaic Co., New Albany, Ind.

HARD MAPLE

When the quality of being hard is required in Maple, Vermont or Adirondack stock should be specified. Maple will not grow harder for us than other people, but it certainly does grow harder in this section of the country than elsewhere.

WE CAN MAKE PROMPT SHIPMENTS.

GEO. WEBSTER LUMBER CO.

New York Office
25 West 42nd St.

21 Besse Place, Springfield, Mass.

JONES HARDWOOD COMPANY

WHOLESALE DEALERS IN

HARDWOODS—Poplar and Gum

33 Broad Street, BOSTON, MASS.

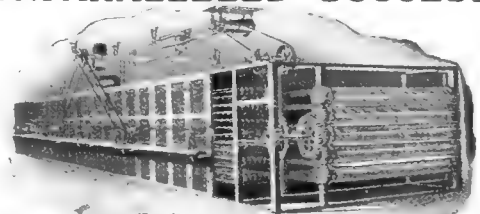
Saw Mills Designed and Built

Plans and specifications prepared. Construction supervised. First class heavy millwright work. Entire plants surveyed. Machinery for complete mills. Fire loss adjustments. Practical sawmill engineer. Can save you money. Highest testimonials.

C. M. STEINMETZ, P. O. Box 83, Washington, D. C.

PROCTOR VENEER DRYER FIREPROOF —AN— UNPARALLELED SUCCESS

No
Splitting
Nor
Checking
No
Clogging
Nor
Adjusting



Recommended by
all those
who
have tried
it

THE PHILADELPHIA TEXTILE MACHINERY COMPANY
DEPT. L HANCOCK & SOMERSET STS. PHILA., PA.

CHARLES HOLYOKE
141 MILK STREET, BOSTON, MASS.
HARDWOODS

You can't afford to be without *The Gibson Tally Book*
when it costs but a dollar, if you want the most convenient and accurate system for tallying lumber.
Hardwood Record :: :: Chicago

<p>ASH 4/4, 5/4, 6/4, 8/4, 10/4, 12/4 and 14/4.</p>	<p>AMERICAN LUMBER & MFG. COMPANY Manufacturers and Wholesalers PITTSBURGH, PA.</p>	<p>POPLAR 4/4 Bay Poplar (Tupelo 1st and 2nds.)</p>
<p>MAPLE 4/4, 5/4, 6/4, 8/4, 10/4, 12/4 and 16/4.</p>	<p>HARDWOOD White and Yellow Pine</p>	<p>OAK White and Red, Quartered and plain sawed, all grades and thicknesses.</p>
<p>YELLOW POPLAR</p>	<p>We make a specialty of thick White Ash, Hard Maple and White Oak. Railroad Car and Construction Oak timbers, long lengths and special sizes.</p>	<p>CHESTNUT All grades and thicknesses.</p>
<p>All grades and thicknesses.</p>	<p>Write for prices before heavy call for Spring requirements.</p>	<p>SPRUCE All grades and thicknesses.</p>

R.E. Wood Lumber Company

☐ Manufacturers of Yellow Poplar, Oak, Chestnut, Hemlock and White Pine.

☐ We own our own stumpage and operate our own mills.

☐ Correspondence solicited and inquiries promptly answered.

GENERAL OFFICES:
CONTINENTAL BUILDING.

Baltimore, Maryland



Panel and No. 1 Poplar

5 cars 4/4" 18/23"

5 cars 4/4" 24" and up

Let Us Have Your Inquiries

RUSSE & BURGESS, Inc.

Memphis, Tennessee

Dry Poplar for Immediate Shipment

2 cars 4/4 Fas.
2 " 4/4 Saps, Selects.
3 " 4/4 No. 1 Common.
3 " 6/4 No. 2 Common.
1 " 8/4 Fas.
2 " 8/4 Saps, Selects.
5 " 8/4 No. 1 Common.
4 " 8/4 No. 2 Common.
2 " 10/4 No. 1 Common.

FAUST BROTHERS LUMBER COMPANY

Sales Office
1319 Fisher Bldg., CHICAGO

Main Office
PADUCAH, KENTUCKY

FIRE
INSURANCE

Lumber Underwriters

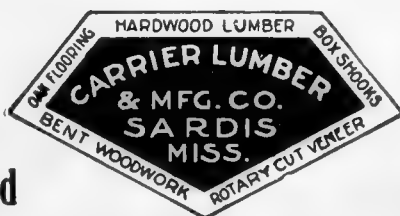
66 BROADWAY
NEW YORK

A. F. PERRY, Manager.

OAK FLOORING

Kiln-
Dried

Polished



Hollow
Backed
and
Bundled

Table of Contents

COVER PICTURE:	Page
Log Slide Used in Eastern Mountain Operations	17
REVIEW AND OUTLOOK:	
General Market Conditions	17
The Hardwood Situation—Past and Present	18
On Oak Grading	18
The Consignment Evil	18
Cover Picture	18
Policy of Hardwood Record	19
Northern Cut and Shipments for 1912	19
Coming Meetings	20
To Check Forest Fires	20
CARTOON:	
Hardwoods	21
AMERICAN FOREST TREES:	
Madrona	22
SPECIAL ARTICLES:	
Modern Cruising Valuable in Logging	23
Odd Use for Wood Toothpicks	23
Wood Industries of New Hampshire	24
Experimental Kiln-Drying	25
Progress of Forestry	25
Oak of Size and Character	26
Impressions of a Tenderfoot	27
1911 Lumber Cut by States	28
Lumber and Shipbuilding in Scotland	29
Passing of the Country Mill	30
U. S. Forester's Annual Report	31
Selling Lumber Mechanically	32
A New Mexican Hardwood	33
The Weight of Wood	34
New Wood for Gunstocks	35
THE MAIL BAG	36
NEWS MISCELLANY	36
HARDWOOD NEWS NOTES	41
HARDWOOD MARKET	46

SUBSCRIPTION TERMS: In the United States and its possessions, and Canada, \$2.00 the year; in foreign countries, \$1.00 extra postage.

In conformity with the rules of the postoffice department, subscriptions are payable in advance, and in default of written orders to the contrary, are continued at our option.

Instructions for renewal, discontinuance, or change of address, should be sent one week before the date they are to go into effect. Both old and new addresses must be given.

Both display and classified advertising rates furnished upon application. Advertising copy must be received five days in advance of publication dates.

Entered as second-class matter May 26, 1902, at the postoffice at Chicago, Ill., under act of March 3, 1879.

ICHABOD T. WILLIAMS & SONS

Foreign and Domestic Woods In Logs, Lumber and Veneers

11th Ave. and 25th Street
NEW YORK

910 So. Michigan Avenue
CHICAGO



Hardwood Record



Published in the Interest of the American Hardwood Forests, the Products thereof, and Logging, Saw Mill and Wood-Working Machinery, on the 10th and 25th of each Month, by

THE HARDWOOD COMPANY

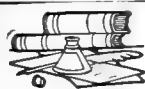
Henry H. Gibson, Editor and Manager
Edwin W. Meeker } Associate Editors
Hu Maxwell }

Entire Seventh Floor Ellsworth Building
537 So. Dearborn Street, CHICAGO
Telephones: Harrison 8086-8087-8088

Vol. XXXV

CHICAGO, JANUARY 10, 1913

No. 6



Review and Outlook



General Market Conditions

WITH NO POSSIBILITY of a material change in the stock situation during the next five or six months, the general hardwood market continues on the same firm basis that it has maintained for several months in the past. The upward trend of prices has continued and it is anticipated that further advances will be noted in some items. No excess stock is reported in any section of the country, even though northern mills are having splendid logging weather and are now equipped with their full quota of woodsmen, but the unusual shortage will more than offset any increased production that might result from increased mill activity.

With modern methods of perpetual stock reports, the inventory season does not stretch out over the long period that it used to. As a consequence a fair percentage of the buyers have gotten back into the market. There is still to be noted, however, a tendency to give inventory-taking as an excuse for not placing orders. It is doubtful though that this hesitancy is with the view of waiting for a break in prices, as every intelligent buyer is undoubtedly well aware of the staunchness of present market values on hardwoods.

The general opinion of the trade continues to be that the coming year will be one of the strongest that hardwoods have ever experienced. The opinion is usually expressed, however, that the strength will not be in the nature of a boom, but of a healthy and steady increase in the demand for products of the hardwood forests.

The Hardwood Situation—Past and Present

IT IS CUSTOMARY at this time of the year for the average lumberman to review the immediate past of his business and analyze the immediate future prospects in as careful and painstaking a manner as possible. As history notoriously repeats itself, this is the only means he has of making logical plans for the future.

To go back to 1911: This year was really the final one in which all commercial enterprises were dragging, and the hardwood lumber business was no exception to other lines of endeavor. Business was dull, stocks accumulated; and while the good end of the hardwood product was sold, but at much below its true value, the coarser grades piled up in what was then regarded an appalling magnitude.

Quite early in 1912 hardwood lumber commenced moving more freely, at advanced prices, and even before midsummer there was very little high-grade lumber either in first hands or in the

possession of ultimate consumers; and users of hardwood commenced to figure seriously on the utilization of lower grades in the belief that they could be profitably employed. The sales of low-grade lumber gradually increased until at the end of 1912 there was just as serious a shortage in low-grade stock as there was in high-grade. To be sure, the extreme coarse end of hardwood went into the crating and box business quite largely, but the medium low grades have to a wonderful extent taken the place of No. 1 common and firsts and seconds in many lines of production.

At the opening of 1913 hardwood stocks are very low the country over, and in a good many lines there is an absolute famine. This is notably true in plain oak, but a good many other woods are in nearly the same situation.

To epitomize: Desirable hardwoods of all varieties are in remarkably short supply at the present time, and the demand is strong with prices steadily strengthening.

In hardwoods there seems to be no menace in sight in the way of a possible over-production. While there are many more small operators in hardwoods than there are in the building wood manufacture, the small operators are gradually growing fewer in number and timber holdings are now quite largely grouped in large blocks and are in the hands of strong ownership. It is doubtful if it will be possible to ever again create a marked over-stock of hardwood lumber, as the hardwood areas of the country are very much proscribed and essentially all important sources of supply are now in the hands of operators.

The hardwood situation is in very much better shape prospectively than the building woods. The Northwest has still untold millions of high-class conifers that undeniably will be crowded onto the market for years to come, but in hardwoods this condition cannot obtain. A comparatively small hardwood area must supply the entire country east and west, as well as a not inconsiderable foreign demand.

It must be borne in mind that hardwood production today constitutes only about twenty per cent of the total lumber produced in the country, and beyond this there is a fast-growing demand for hardwoods that can scarcely be met by the supply. The increased wealth of the nation, better taste and better judgment all contribute to a marked increased use of hardwoods for flooring and finishing purposes in all building construction. Even low-priced cottages are today finished in hardwoods of beauty and permanence. This demand will probably increase rather than diminish for years to come, as the attempts to introduce steel and other alleged fireproof materials for the finishing of high-class structures generally seem to be regarded as futile and unde-

sirable as compared with the beautiful results obtainable in high-class hardwood finish. At one time steel as a finishing material was regarded as a menace to future utilization of hardwoods for this purpose, but it is fair to assume today that this is a bugbear which will never seriously militate against hardwood utilization.

From every viewpoint then hardwoods and the prospect of money-making in their production is the one best bet in the entire lumber business. No owner of hardwood stumpage who does business on even reasonably good lines can fail to achieve a handsome profit out of lumber production. Hardwood stumpage is the best and cheapest thing there is on the market today, and the one good place for logical investment.

On Oak Grading

AN ESTEEMED AND COMPETENT southern hardwood lumberman writes *HARDWOOD RECORD* substantially as follows: "I am coming in contact with all kinds of oak values being shipped under the same name, i. e.: firsts and seconds, No. 1 common and No. 2 common coming from different points, in which the values of these grades, from one point in some cases, are almost double what they are from another.

"Another method that I find is being pursued quite largely is the splitting up of the different grades, making two and sometimes as high as three different values from one grade of lumber, not described by either of the grading rules of the two chief hardwood associations. As a matter of fact as things are now conducted I find that the name of the grade of lumber does not signify very much. Some people are offering one grade of lumber on a given grade and name, where the other is on another, and the buyer is not justified in paying the price that is asked in certain places. I find that there is as much as five dollars a thousand difference being asked for the grades of firsts and seconds, No. 1 common and No. 2 common, and also that there is fully that much difference in the value of the stock. This is the only demoralizing thing in the hardwood situation today.

"For the present, closer utilization of oak in ultimate consumption seems to be the desire on the part of buyers, who seek specific grades made best suited for their use, and I believe the time has come when more grades should be made in oak. Consumers of lumber today are getting to a point where they are figuring on getting values in the lumber they buy, and are specializing more on the grades they use. They are willing to pay a premium in order to get the grade they require that will show as little waste as possible. With this tendency in view I believe the time has come when those having inspection matters in charge should accommodate their grading systems to the requirements of the buyers, which at the same time would develop a better profit for the manufacturer."

The matter of inspection of hardwoods is one that is perennial, and inasmuch as the present system, which no one holds is perfect, is fairly satisfactory, it matters not how desirable amendments may be in the grading of lumber, and is quite doubtful if the majority will ever consent to any radical amendments in the present rather crude, and in many instances unsatisfactory methods of inspection. However, there is meat in what *HARDWOOD RECORD*'s correspondent has to say on the subject of oak inspection. There really is no accurate basis today for determining values.

The Consignment Evil

FOR THE FIRST TIME in four years Gustav A. Farber, London representative and partner of Russe & Burgess, Inc., Memphis, Tenn., is visiting the United States. He spent the holidays with a number of his relatives at Baltimore, and incidentally called on a number of his old friends among whom his memory is kept green. While in this country, Mr. Farber will visit several of the hardwood sections of the country, and then go to Memphis to confer with members of his company on business matters.

Mr. Farber was interviewed by a *HARDWOOD RECORD* repre-

sentative a few days ago and talked most interestingly and instructively about trade export conditions. Mr. Farber makes the emphatic assertion that the foreign business can not be successfully conducted except by the aid of a foreign representative who is always on the ground to look after shipments and settle any possible controversies that may arise between seller and buyer.

Mr. Farber certainly has made a great success of his work abroad, and being not only a thorough lumberman, but a linguist as well, has helped him greatly in his ability to grapple with the constantly changing conditions arising in the hardwood export business. He is a man of extreme perseverance and tactfulness, and has attained a reputation for fairness that makes him very popular with buyers of Great Britain and the Continent.

While Mr. Farber's relations with foreign wood brokers are pleasant, he does not hesitate to assert that many of them do not always carefully look after the interests of the shippers as they should, and that their position as intermediaries between the exporter and buyer renders them less zealous in securing at all times for the shipper his just due. They seem to feel that they can not afford to incur the ill will of the buyer and this tends to make them unmindful of the interests of the shipper.

To illustrate this point Mr. Farber stated an instance in which a broker having information that a shipment of lumber was in transit, went around among the trade offering it for sale. The prospective buyer knowing that the lumber was being forwarded on consignment was not willing to pay the very fair price mentioned, which would have left the exporter a small margin of profit. The broker immediately asked the buyer what he would give for the stock. A price was named, which meant a definite loss to the shipper, but which price the broker accepted and advised the exporter that this was the best figure obtainable. This situation Mr. Farber states is merely a sample of what is being repeated with great frequency on consignment shipments, and illustrates the weakness and foolishness of this system of doing business. Almost invariably customers who do business on these lines unload their stock at a heavy loss and at a much less price than they could get for the lumber at home.

Mr. Farber says that one of the greatest drawbacks to the export lumber trade is the English credit system under which the buyer demands six months' terms of settlement. This method imposes a financial strain upon the seller which few of them can stand, and furthermore is bad all around for the reason that it places business upon a false basis. It virtually gives the buyer the use of the seller's money for six months without any return to the seller and renders it extremely difficult to hold the buyer down to a volume of credit to which he is entitled within the limit of safety.

Under this system the broker has found his opportunity, and usually allows the exporter to draw against shipments for a portion of the amount due and carries the buyer. This system places the exporter and to some extent the buyer at the mercy of the broker. Mr. Farber insists that the only correct method of handling the export lumber trade is to handle it as other lines are handled, i. e., on a cash basis at the usual discount, with the six months' time feature eliminated. He is further insistent that the consignment business for the best interests of all concerned should be eliminated as at its best it is full of dangers and pitfalls, which have resulted in very few American hardwood exporters ever having made any considerable profit out of foreign business, where logically they should have made no inconsiderable profit.

Cover Picture

COMMENCING WITH THIS NUMBER of *HARDWOOD RECORD* the front cover of each issue will be embellished with a picture illustrating some important phase of forest growth, woods operations, or lumber utilization. The picture on the front cover of this issue illustrates the most recent and economical type of log slides, which is of the plank type. This system of getting logs off steep mountain sides

has been practiced for many years in the rough country of both the East and the West. The earlier types of these slides were made of logs which were never entirely satisfactory on account of their initial cost, the waste of forest material and general crudeness.

The plank slide here depicted is an evolution in slide building which is far in advance of a timber slide, and in efficiency and cheapness of operation ranks second only to the logging railroad, and in some instances can be employed economically to better advantage than a railroad, where slopes are too steep to make the operation of a logging road possible.

The details of the construction of these slides has previously been described in **HARDWOOD RECORD**. This picture was made in the operations of the Little River Lumber Company in Sevier county, Tenn.

Policy of Hardwood Record

THIS ISSUE of **HARDWOOD RECORD** will go to its numerous clientele involving timber owners, lumber manufacturers, woodworking machinery makers, veneer and hardwood flooring producers, furniture and other woodworking factories, etc., with a new makeup and with broadened plans for increased usefulness.

The average astute lumber producer who is a close student of his affairs is of the opinion that lumber production and utilization in the United States has yet achieved scarcely fifty per cent of its ultimate efficiency. That is, he avers that less than fifty per cent of possible forest utilization has as yet been attained.

To assist in better efficiency is certainly the province of the logical lumber trade newspaper, and it is with this end in view that hereafter **HARDWOOD RECORD** will be transformed into what will be practically a hardwood magazine, devoted to both scientific and commercial matters, inclusive of news and market reports, that are germane to the hardwood forest and the products thereof. To a large extent trivial and unimportant alleged news matter and the accompanying "con, bunk and piffle," with which the trade press is burdened, will be eliminated, and an earnest attempt be made to produce a periodical that shall not only be of interest, but of essential educational value to everyone connected with the production, distribution and utilization of hardwood lumber.

The editors do not propose to tell the lumber trade what they know about the lumber business, but will attempt to reflect the best opinions of the best talent covering all phases of forestry, logging, manufacture, seasoning, assorting, sales, distribution and utilization of the splendid remaining hardwood forests of the country.

While the editorial staff of the publication remains unchanged, co-operating with it will be a large number of contributors who will write on topics on which they are authorities. There will also be a series of articles from scientists, who up to this time have had but small distinction or even respect, but whose studies and knowledge of sundry phases of the subjects involved are now being regarded as of paramount educational value to the trade.

What the lumbermen of this country do not know about the lumber business is astounding even in comparison with the more specific and accurate knowledge possessed by foreign wood users. It is safe to say that the average Englishman or German has a better knowledge of the physics and value of American woods than the vast majority of American operators. It is held that the majority of

American lumber manufacturers have been too busy in "sawing wood" to find time to make themselves scientific students of the great business in which they are engaged, without which a high and desirable efficiency is impossible of attainment.

From the **HARDWOOD RECORD** it is hoped that every element of the trade with information to a better knowledge of the calling, and ultimately to a much higher efficiency along every line of the business, that the prevailing scandal of less than fifty per cent efficiency shall become past rather than current history of the hardwood industry.

Northern Cut and Shipments for 1912

THE NORTHERN HEMLOCK AND HARDWOOD Manufacturers' Association has issued an interesting statement of the cut and shipments reported by association members covering the period December 1, 1911, to November 30, 1912. The statistics were compiled on a basis of reports of an average of seventy-four concerns, members of the association. The report shows a total cut of all hardwoods aggregating 259,017,000 feet with shipments aggregating 319,062,000 feet. It is interesting to note the excess of shipments over cut during the year.

The cut of hemlock during the year was 405,626,000 feet, and the shipments 545,935,000 feet, also a decided excess of shipments over cut.

In ash the cut was 6,085,000 feet against shipments of 10,370,000 feet; for basswood the cut was 40,308,000 feet and the shipments 50,730,000 feet; for birch the cut was 72,454,000 feet and the shipments 99,249,000 feet; the cut of elm was 23,770,000 feet and the shipments 29,062,000 feet; the cut of maple was 65,279,000 feet and shipments 76,605,000 feet; in oak there were 2,563,000 feet cut and 3,614,000 feet shipped. Thus it is seen that in every item there is a decided excess of shipments over cut.

All these items showed a gradual increase in the cut month by month up to early summer months, after which

time the cut gradually decreased. The aggregate hardwood cut showed a decided increase during the first four months. The same figures were maintained then for March and April, 1912, after which there was a rapid falling off up to September. October showed a slight increase over September cut, but for the month of November a further decrease was noted from the figures for the preceding month.

With the exception of January, 1912, shipments of all hardwoods were maintained fairly uniformly until the end of April. January showed a considerably lesser shipment than the other five months. From April to May there was a decided jump, though May and June were approximately the same in shipments. The months of July and August, however, each showed a gain of about five million feet in hardwood shipments, while September showed a falling off of about seven million feet. October came back with a gain of six million feet, while the shipments for November were three million feet less. This would indicate that the heavy snows last January seriously affected the shipments, but that when they did start there was a steady demand which was maintained throughout the summer, and gradually increased up to the end of the summer months, the car shortage then effecting less steady shipments.

E. B. Brown

Dealer in

Wholesale Wagon Stock

Buffalo, N. Y., Nov. 12, 1912.

Hardwood Record,
Chicago, Ill.

Gentlemen:—Will you kindly cancel my ad in your classified ad section.

In the four insertions, I have received fifteen applications to date, and have secured a first-class man to represent me in the South. I cannot say enough for your paper as an advertiser. It certainly reaches everybody in the lumber business.

Yours very truly,

E. B. BROWN.

Coming Meetings

THERE IS EVERY REASON to believe that the coming meeting of the Indiana Hardwood Lumbermen's Association, which will be held at the Hotel Dennison, Indianapolis, on Thursday, January 16, will be a successful function in every way. A program of the meeting just issued shows that some mighty good papers will be read. E. M. Elliott, prominent in railroad circles in Indianapolis, will talk on "Co-operation Between Railroads and Shipping Interests." He will be followed by W. M. Prall, superintendent of car service at Pittsburgh, who will talk on "Interdependent Relationship of the Shipper and the Railroad in Service, with Direct Relationship to Demurrage Rules and Regulations." Judge Wood, chairman of the railroad commission of Indiana, will follow with a talk on "The Shipper and Railroad Regulation." This offers an excellent trio of speakers, as they are amply qualified to talk instructively and authoritatively on the various questions bearing on the important subject of transportation. Chandler Coulter of Purdue University will then give a talk on "Forestry." The banquet will follow the business meeting in the evening.

The annual meeting of the American Forestry Association took place at Washington, D. C., on January 8, 1913, at the Hotel Willard. This was the thirty-first annual meeting of this association. The program included regular business, directors' meetings and many addresses of value. A luncheon was served at noon at the hotel.

A call for the second Lake States Forest Fire Conference has been issued by Governor Charles S. Osborn of Michigan, the conference to be held at Lansing, Mich., January 21 and 22. The call comes directly from the governor and states that:

Whereas, the timber resources in the lake states are rapidly decreasing, and largely through the agency of forest fires; and,

Whereas, a complete realization of this loss, together with the knowledge of means of control and prevention, would be welcomed by all interests, the governor of state of Michigan invites all those interested to meet in conference, and to devise ways and means to obtain and spread such knowledge relative to the preservation of timber as may be possible.

Secretary-Treasurer J. P. Bartelle of the Union Association of Lumber and Sash and Door Salesmen, with headquarters at Toledo, O., announces the banquet of that association at 7 p. m., January 20, at the Hotel Statler, Cleveland, O.

The American Wood Preservers' Association will hold its ninth annual convention at the Sherman hotel, Chicago, January 21, 22, and 23. A number of papers, by experts in particular lines, are listed for presentation, and promise to make this meeting of much interest and value to those who attend. The field of the wood preserver is a broad one. Among other commodities, it includes railway ties, car material, bridge and other structural timbers, piling, poles, cross arms, and paving blocks. There is constantly something new being discovered in preservative materials, and the exchange of ideas and comparison of experiments at these annual meetings always mark an advance. Progress in wood preservation has been rapid in recent years, but there is no reason to suppose that it is to be less rapid in the future. It is acknowledged to be one of the most practical ways of conservation. It is better to double the period of service of one set of timbers than to use two sets. It is cheaper and in other ways more economical. By treating cheap or quickly decaying wood it can be made to take the place of timbers that are scarce and high priced. The field is constantly enlarging, and methods are improving, with the object constantly in view of making present supplies of timbers wear out instead of rotting out.

R. S. Kellogg, secretary of the Northern Hemlock and Hardwood Manufacturers' Association, with offices at Wausau, Wis., announces the annual meeting of his association at the Hotel Pfister, Milwaukee, on Wednesday, January 29.

The annual meeting of the Michigan Association of Traveling Lumber and Sash and Door Salesmen, with headquarters at Detroit, Mich., will be held at Kalamazoo, Mich., on February 3, 1913.

To Check Forest Fires

A CIRCULAR has been distributed throughout the country, with Curt Thiersch as author, advocating a new plan, which is not altogether new, of checking fires in coniferous forests by planting belts of broadleaf species at intervals. The method consists of cutting lanes of sufficient width through the forests and planting hardwoods in place of the needleleaf trees removed. Cross lanes of the same kind will complete the scheme of defense. The evergreen forests will thus be divided into blocks or squares of such size as the forest engineer in charge shall decide upon.

The plan is based on the well-known fact that a broadleaf forest usually burns more slowly than one of the needleleaf type. In the former, the fire creeps along the ground, consuming the mat of fallen leaves, and is seldom fierce or fast, unless dry ground litter is unusually abundant; but the reverse is generally the situation when resinous trees, such as pines, firs, and spruces, burn. Fire is apt to climb to the crowns and envelope the whole forest, from ground to tree tops, in a mass of flame. This is particularly liable to occur if the wind is strong. Such a fire is difficult to check. In fact, it frequently gets beyond human control and runs until it is stopped by open country, or is extinguished by rain.

The plan proposed by Mr. Thiersch has some merit, but it is evidently based on theory rather than practical experience and a recognition of the laws of tree growth. Some railroads have tried it along their rights of way with success. The green crowns are good spark arresters; and the dead leaves can be raked from the ground to prevent surface fires from creeping through. Under similar conditions strips of hardwoods through pine forests would do as well; but the conditions would seldom be similar. Unless the ground were kept raked clean, a fire would approach through the pines, crawl across the belt of hardwoods, and in five minutes be running wild on the other side. The hardwood belt would, however, provide an admirable line of defense for fire fighters. If they were there at the right time, and in sufficient numbers, they could generally stop the fire, provided it were a moderate one. They could not, however, stop a violent crown fire, unless the hardwood belt were very wide. Crown fires have been known to leap half a mile. Fires of that kind are, however, an exception to the rule and should not be urged as a reason against trying the hardwood belt method, if it seems otherwise practicable.

A fundamental fact seems to have been overlooked in suggesting the plan. It has been assumed that broadleaf trees will grow in strips where the pines are cut out. In some cases they will, but in most cases they will not. If the climate and soil were such that hardwoods could grow, the pines would not be there. The broadleaf trees would already be in possession. The principal needleleaf forests needing protection against fire are those on the high, dry, sterile mountains and plateaus of the West. Only hardwoods of the most miserable sort, often mere brush, and sometimes not even that, will grow there. It is impossible to put the hardwood belt scheme into practice in that region, and it comprises about a million square miles, and includes nearly all the softwoods forests that are now suffering greatly from fire.

The broadleaf species are generally much stronger and more aggressive than the softwoods, in fighting for ground. When both have an equal chance, the former generally get possession and hold it. But the pines can get along on ground so poor and dry that their competitors cannot grow there. The result is that in the natural arrangement of forests in this country, the needleleaf trees have been crowded from the fertile ground and have occupied dry, poor, and cold situations where their broadleaf competitors would starve to death if they tried to follow. Therefore, to advocate the planting of the hardwoods in such situations is to ignore one of the facts of nature.

It should not be supposed that the forest areas, belts, and stands simply happen to be where they are. They have arranged themselves in accordance with laws of plant ecology which have been developed during thousands of years of competition and struggle, and it is not in man's power to change these laws, or to annul them, except to a very limited extent.



Pert, Pertinent and Impertinent



The test of a man is the fight he makes.
The grit that he daily shows.

The way he stands on his feet and takes
Fate's numerous bumps and blows.

A coward can smile when there's naught to fear,
When nothing his progress bars.

But it takes a man to stand up and cheer
While some other fellow stars.

It isn't victory, after all.

But the fight that a brother makes.

The Test of a Man

The man who stands up
Still stands up erect and takes
The blows of fate with his head held high,
Bleeding and bruised and pale,
Is the man who'll win in the by and by,
For he isn't afraid to fail.

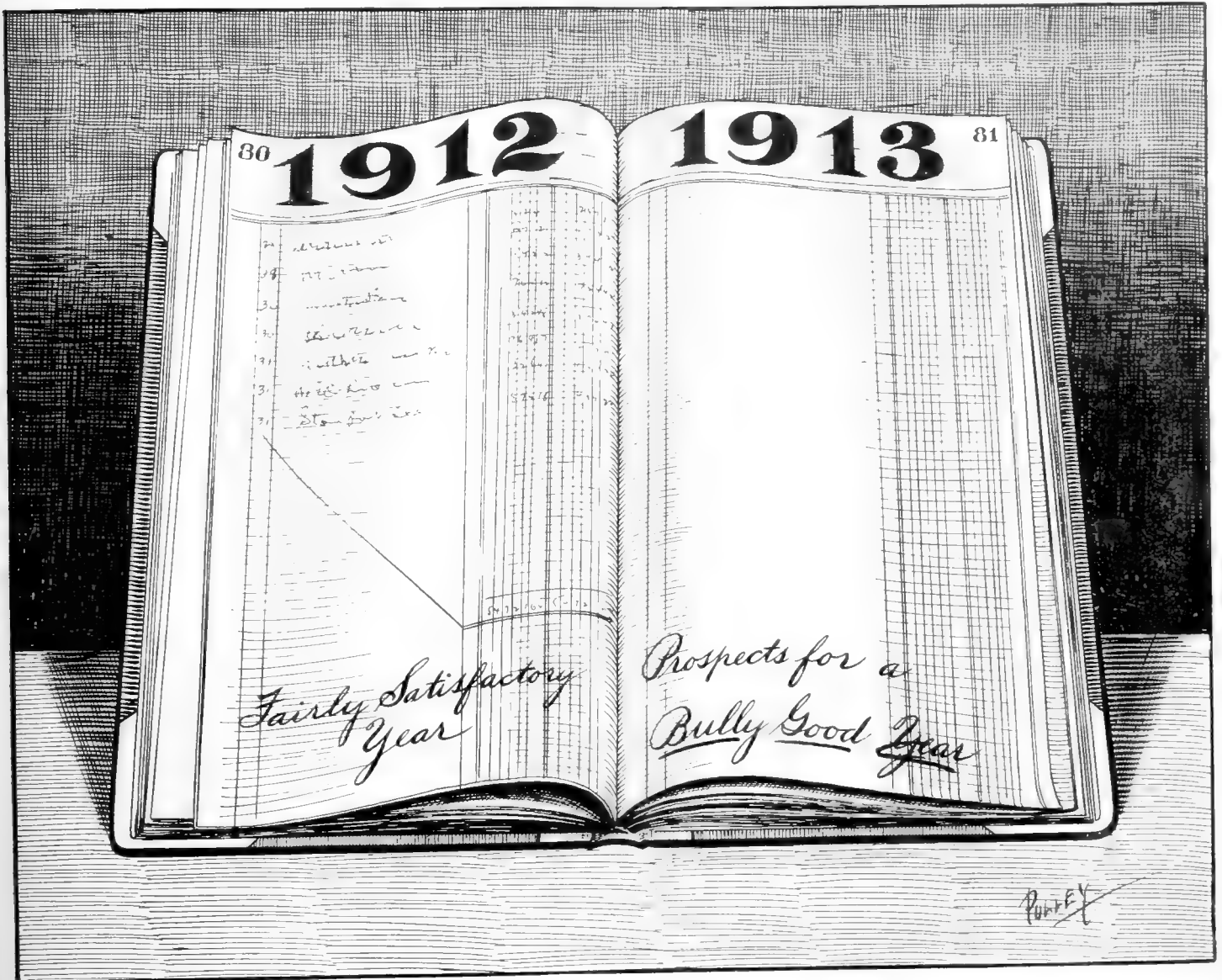
It's the bumps you get and the jolts you get
And the shocks that your courage stands,
The hours of sorrow and vain regret,
The prize that escapes your hands.

It isn't the blows you deal,
But the blows you take on the good old earth
That show if your stuff is real.

Nowadays

Old Opportunity mopped his brow,
And hung around a spell,
"No use," he grumbled, "of breaking new -
"I've got to ring the bell!"

HARDWOODS



One Better

A western buyer is inordinately proud of the fact that one of his ancestors affixed his signature with many a curve and flourish. The salesman's patience becoming exhausted in waiting for the buyer to recognize him, he finally observed:

"You have a fine signature, Mr. So-and-So."

"Yes," admitted the buyer. "I should have. One of my forefathers signed the declaration of independence."

The Way the Books Balance

"So?" said the caller, with rising inflection. And then he added:

"Vell, you ain't got nothin' on me. One of my forefathers signed the ten commandments."

No Assistance Needed

As the train neared the city, the colored porter approached the jovial-faced gentleman, saying, with a smile:

"Shall Ah brush yo' off, sah?"

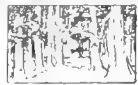
"No," he replied. "I prefer to get off in the usual manner."

Things That Went Wrong

A flashily dressed man whose name may be given as John Doe had just registered at a hotel in a thriving young city in Kansas.

"Is there any place here," he inquired, addressing the hotel clerk in a low tone and with a scarcely perceptible wink, "where they sell wet groceries to thirsty travelers?"

"Wet groceries?" said the clerk, with a bewildered look. "O, you mean tomato catsup, canned soups, and such things as that. Yes, sir; you can get them at any grocery store."



American Forest Trees



ONE HUNDRED-THIRD PAPER

MADRONA

(*Arbutus Menziesii*—Pursh)

Madrona is an interesting tree which ranges from British Columbia southward to central California, attaining its greatest development in the redwood forests of northern California, where trees are sometimes one hundred feet high and six or seven feet in diameter. It is not only an interesting tree itself, but it has many interesting relatives, some of which are trees, others shrubs, and still others only small plants or vines. It may be called a second cousin to the common huckleberry, the mountain laurel, trailing arbutus, the azaleas, the tiny wintergreen, and the great rhododendron. It has some poor relations, but many that are highly respectable. It belongs to the heath family, of which there are seventy genera, and more than a thousand species; but less than half of them are in America, the others being scattered widely over the world.

The madrona, when at its best, is one of the largest members of the family; but it is not always at its best. It sometimes degenerates into a sprawling shrub, where it grows on poor ground and on cold, dry mountain tops. It is manifestly not fair to study any tree at its worst, and it is particularly not fair to the madrona, which varies so greatly in its appearance. At one place it may be scarcely large enough to shade the lair of a jackrabbit, and at another it spreads its branches wide enough to shade an army—a small army, however, say, about two thousand men. A tree of that size may be found within a few hours' ride of San Francisco. Its branches cover an area of from eight thousand to ten thousand square feet.

When madrona grows in the open it throws out wide limbs like a southern live oak, though not so large or long. Its crown is rounded and graceful; but when it grows in forests, where other trees crowd it, the trunk rises straight up to lift the crown into the sunlight and fresh air. The madrona is seen in all its glory in northwestern California, where it catches some of the warmth and the moist air from the Pacific. It follows the ranges of the Siskiyou mountains eastward near the boundary of California and Oregon. It is usually mixed with other forest trees, but sometimes large stands nearly pure are encountered, and there the long trunks, rather gray near the ground, but wine-colored above, rise in imposing beauty and are lost in the evergreen crowns.

The leaves suggest those of laurel, but are broader. The large clusters of white flowers are among the glories of the vegetable kingdom. George B. Sudworth, dendrologist of the United States Forest Service, who usually describes in strictly prosaic terms, breaks away from that habit long enough to compare madrona

flowers to lilies of the valley, in his "Forest Trees of the Pacific Slope." The flowers appear from March to May, depending on latitude and elevation.

The brilliant orange-red fruit ripens in the fall, and is often borne in great abundance. It renders the crowns of the trees very beautiful. The fruit is about half an inch long and contains many small angular seeds. The fruit is said to contain a substance which puts to sleep wild creatures that feed on it. The claim is probably mythical, for birds breakfast extravagantly on it in the morning, and apparently do not do any sleeping until after sunset.

This tree was discovered by and named for Archibald Menzies, a Scotch botanist who traveled in the Northwest more than a hundred years ago. It has several local names, among them being mandrove, laurel wood, mandrone-tree, laurel, and manzanita. The last is the proper name of another small tree which is associated with madrona and is closely related to it.

The wood weighs 43.95 pounds per cubic foot. It is a little below eastern white oak in fuel value, a little above it in strength, and somewhat under it in stiffness. The color is pale reddish brown, resembling applewood in tone, but generally not quite so dark. The wood is porous, but the pores are very small. Medullary rays are numerous but thin. On account of the rays being of a little deeper red than the other wood, quarter-sawed stock is handsome and of somewhat peculiar appearance. The figure is much like quarter-sawed beech, but of deeper, more handsome color. The contrast between springwood and summerwood is not strong, though easily seen. Generally, the summerwood constitutes about one-fourth of the annual ring. The tree grows slowly, but with much irregularity. The increase in one season may be four or five times as great as in another. The bark exfoliates, and is quite thin.

Madrona has never been put to much use. Difficulties in seasoning it have stood in the way. The wood warps and checks. Similar difficul-

ties with other woods have been overcome, and such troubles should not be unduly discouraging. The beauty of the wood is unquestioned. It presents a fine appearance when worked into furniture, particularly in small panels and turned work, like spindles, knobs, and small posts. When made into grills it shows a surprising richness of tone. The wood polishes almost to the smoothness of holly. Small quantities are made into flooring; a little goes to the furniture makers; lathes turn some of it for novelties and souvenirs; fuel cutters sell it as cordwood; and tankbark peelers cut the trees for



MADRONA TREE NEAR THE NORTHERN LIMIT OF ITS RANGE AT SEATTLE, WASH.

the thin, papery bark. In that case the trunks are left to decay, unless they happen to be convenient to a cordwood market.

One of the most extensive uses for the wood of madronas for charcoal burning. Blacksmiths buy it because it is cheaper than coal, and some is used in shops where soldering and welding are

done. But the most exacting demand comes from gunpowder manufacturers. They find this wood almost equal to alder and willow as a source of charcoal suitable for powder.

The accompanying illustration is from a photograph taken by the editor of *HARDWOOD RECORD* near Seattle, Wash.



Modern Cruising Valuable in Logging



A man of long and successful experience in hardwood logging stated, in a discussion of logging efficiency with the writer, that if one knew with some degree of accuracy the amount of timber to come out of a given hollow or other logging unit, the choice of the cheapest and best method for logging that hollow would be comparatively simple. But, he said, that fact was practically never known. Usually a practical logging man, after going over the timber, makes a guess at what is there, and feels satisfied if his estimate is under the actual cut by a very good margin.

The truth of his statement is obvious. Almost every man of experience knows from the records of past operations the cheapest way he can log a hollow, provided he knows how much is coming out of it. In other words, the stand is the key to the amount and character of the improvements which are economical. In fact, it is and almost must be the key to the choice of the most efficient method of logging a given unit.

Most lumbermen "take a chance" on what will come out of a hollow, and log accordingly, in nearly every case preferring to spend too little on improvements in order to be absolutely sure of "playing safe." The writer knows personally of cases where a different method would have been chosen—and at a great saving—if this important factor of stand had been known.

The reason for this is undoubtedly that most lumbermen believe an estimate far too expensive to justify itself. It is a fact, however, that in Maine estimates are made of townships, including a tree to tree caliper measurement of two and one-half to three per cent of the area, and clearing and blazing of section lines which divide the township into mile squares, for less than ten cents an acre. In addition to this estimate, and from data gathered in this work, a topographic map, showing roads, streams, lakes, etc., is prepared, the whole thing costing, as stated before, not over ten cents per acre.

For the purposes of the mountain logger a great deal of this is not necessary. The section lines are of little value and as they cost a little over one-third of the total cost of the cruise, leaving them out would be a great saving. Furthermore, a carefully drawn topographic map, while a very desirable thing in itself, is far from necessary, and further saving could be effected here.

A very practical and cheap method for making a sufficiently accurate estimate of a logging unit in the hardwood region is as follows: A compass and chain traverse should be run around the cutting area. This would require a compassman and two assistants to drag the chain. At stated intervals lines could be run across the topography and every merchantable tree within an area one-half chain wide on either side of the lines could be calipered. The compassman could take notes as he goes along, of streams and other topographical features. Every ten chains of a line like this gives one acre calipered. It would then be necessary only to run enough lines, evenly distributed, as to cover the required percentage of the area. In hardwoods probably a minimum of five per cent should be so calipered. The spacing of the lines can be easily figured after the traverse of the cutting area has been plotted.

The remaining work would consist in computing the average contents of trees of different diameters. Often this is known closely enough for this purpose; if not, a little time spent in following the saw crews and measuring the contents of felled trees will get it.

From this work the stand of the average acre is easily figured, and the area of the whole hollow may be computed from the plotted traverse. A compassman worthy of the name can then figure for a hollow the amount of timber in it; he can draw a sketch map showing the streams and the lay of the land, and, more important than that, the traverse will show him the length, width and shape of the hollow, this last point being important in that it will show the skidding distance, and length of poled road, slide, tramload, or other improvement necessary. Surely, if he knows this, the lumberman can figure out the cheapest way of logging that hollow.

Now, this would not be necessary for the whole area covered by the operation, although it certainly would be desirable; but for those hollows where the method is in doubt it would be invaluable.

Let us look at the cost of such work. If in Maine from two and one-half to three per cent estimates can be made, section lines cleared and blazed, and a map prepared for ten cents an acre, certainly in the hardwood region a five per cent estimate, with no clearing of lines, and only a rough sketch map, can be made for not over ten cents an acre. Assuming, now, a very light stand of merchantable timber, say, two thousand feet per acre, we have a cost of five cents per thousand. But against this cost we have the advantage of knowing closely what we can get out, and being able to figure, with a good degree of certainty, on the amount and character of the improvements possible.

It is the writer's firm conviction that this expenditure of five cents per thousand—and in many cases it would be less, where the stand per acre was heavier—would save itself many times over in the cost of logging. Even in the cases where the estimate merely confirmed the lumberman's opinion of the way he should log it, the additional cost would have insured him against the choice of the wrong method, to find it out only when the work was finished and the money spent beyond recall. In the case of logging by contract it would save just as much, or possibly more, by giving the lumberman a safe basis for estimating what he ought to pay and a proof to the contractor that the price is fair.

Odd Use for Wood Toothpicks

Toothpicks are associated with restaurants rather than with funerals and cemeteries, but, in fact, a very large number of them are consumed in the manufacture of floral designs. Every flower and every leaf which forms a part of a wreath or other design is first wired to a toothpick, and the wood imbedded deep into wet sphagnum moss until the natural stem reaches the moisture, and thus the flowers are supplied with sufficient water to keep them fresh for several days. The toothpicks are put up in cases of 100,000 each and about 6,000 cases are consumed annually in the floral business alone. Here also butchers' skewers and round sticks, eighteen inches in length, are used for the heavier leaves and flowers.

Scarcity of Wood for Pencils

The supply of wood suitable for pencil stock is so reduced that in Tennessee the pencil factories buy logs from old cedar barns and fence rails, in some cases paying as high as ten cents a rail in addition to putting up a new wire fence. The average stumpage value of cedar of saw-log size is \$20.



Wood Industries of New Hampshire



The Forest Service has completed its investigation of the wood-using industries of New Hampshire and the report has been published by the State Forestry Commission in a bulletin of over one hundred pages. This is one of the series of reports which the Forest Service is compiling and which will ultimately cover the whole country, state by state. The government and the states co-operate to the extent that the government collects the data and prepares the reports and the states print them.

The New Hampshire bulletin was written by Roger E. Simmons, statistician of the Forest Service. He compiled similar reports for Illinois, Kentucky and North Carolina, which were published some time ago.

New Hampshire is a large producer and consumer of both hard and soft woods, but softwoods predominate in both output and consumption. The sawmills of the state cut about 443,000,000 feet a year, and the factories consume approximately 423,000,000 feet. The production and consumption of wood are more nearly equal in this than in most states.

The factories of the state report the use of sixteen softwoods and thirty-nine hardwoods, but more than half of all is white pine. The four soft woods most largely used are white pine, red spruce, hemlock and Norway pine; and the four leading hardwoods are yellow birch, sugar maple, aspen and beech. The most costly woods are foreign, and are mahogany at \$136; rosewood, \$206; padouk, \$250; lignum-vitæ, \$347. This last named wood is not usually as expensive as these figures show, and the explanation of its high cost lies in the fact that extra grades were demanded and a comparatively small quantity was used.

The following table shows the various woods used by New Hampshire manufacturers and the quantity of each per year, as well as the average cost of each per thousand feet:

KINDS OF WOOD		QUANTITY USED ANNUALLY		AVERAGE COST PER 1,000 FEET	Total cost f. o. b. factory.
Common name.	Botanical name.	Feet b. m.	Per cent		
White pine.....	Pinus strobus.....	212,859,633	50.33	\$17.88	\$3,805,690.87
Red spruce.....	Picea rubens.....	69,263,280	16.38	19.53	1,359,775.15
Hemlock.....	Tsuga canadensis.....	22,624,725	5.16	14.98	339,965.37
Yellow birch.....	Betula lutea.....	14,848,800	3.51	17.70	262,895.20
Sugar maple.....	Acer saccharum.....	14,058,819	3.32	20.73	291,442.03
Aspen.....	Populus tremuloides.....	11,827,800	2.80	12.66	149,753.21
Beech.....	Fagus atropurpurea.....	9,216,168	2.18	15.13	139,421.99
Paper birch.....	Betula papyrifera.....	8,406,313	1.99	16.32	137,162.20
Norway pine.....	Pinus resinosa.....	8,033,800	1.90	18.01	144,626.00
Balsam fir.....	Abies balsamea.....	6,880,000	1.63	14.48	99,610.00
Red oak.....	Quercus rubra.....	6,110,629	1.44	24.66	150,704.48
Shortleaf pine.....	Pinus echinata.....	6,020,000	1.42	28.86	173,925.00
Longleaf pine.....	Pinus palustris.....	5,153,000	1.22	33.70	173,668.00
Loblolly pine.....	Pinus taeda.....	5,088,000	1.20	29.99	152,780.00
Ash.....	Fraxinus americana.....	3,512,832	.83	33.17	116,592.15
Basswood.....	Tilia americana.....	3,006,836	.73	19.83	61,737.50
Chestnut.....	Castanea dentata.....	2,823,250	.67	20.83	58,019.99
Cypress.....	Taxodium distichum.....	2,645,300	.63	41.56	109,939.00
White oak.....	Quercus alba.....	2,571,215	.61	42.11	108,344.50
Yellow poplar.....	Liriodendron tulipifera.....	1,493,586	.35	55.20	82,462.97
Red maple.....	Acer rubrum.....	1,210,000	.29	17.50	21,174.00
White birch.....	Betula populifolia.....	752,000	.18	16.26	12,227.50
Sweet (black) birch.....	Betula nigra.....	596,000	.14	14.52	8,652.00
Soft elm (white).....	Ulmus americana.....	498,273	.12	38.84	19,345.96
Mahogany.....	Swietenia mahagoni.....	471,500	.11	136.17	64,274.50
Pitch pine.....	Pinus rigida.....	371,830	.09	18.15	6,751.45
Sugar pine.....	Pinus lambertiana.....	350,000	.08	51.29	17,950.00
Redwood.....	Sequoia sempervirens.....	300,000	.07	60.00	18,000.00
Willow.....	Salix nigra.....	230,000	.05	12.55	2,762.00
Douglas fir.....	Pseudotsuga taxifolia.....	212,000	.05	54.83	11,624.00
Rock elm (Cork).....	Ulmus racemosa.....	206,000	.05	19.26	3,968.00
Rock elm (slippery).....	Ulmus pubescens.....	200,000	.05	60.00	12,000.00
Idaho white pine.....	Pinus monticola.....	196,000	.05	60.68	11,884.00
Hickory.....	Hicoria.....	163,000	.04	20.41	3,327.00
Arborvitæ.....	Thuja occidentalis.....	149,000	.04	26.16	3,871.00
Spruce.....	Liquidambar styraciflua.....	141,827	.03	28.35	4,025.85
Red gum.....	Cedrela odorata.....	37,500	.01	126.05	4,790.00
Spanish cedar.....	Ostrya virginiana.....	34,000	.01	15.54	528.50
Hornbeam.....	Populus balsamifera.....	30,000	.01	18.00	540.00
Balm of Gilead.....	Guttieria virgata.....	30,000	.01	130.00	3,900.00
Lancewood.....	Nyssa aquatica.....	25,000	.01	40.00	1,000.00
Yapelo.....	Prunus serotina.....	25,000	.01	68.96	1,566.00
Cherry.....	Cornus florida.....	19,000	.00	87.37	1,660.00
Dogwood.....	Diospyros virginiana.....	15,000	.00	50.00	750.00
Persimmon.....	Dalbergia nigra.....	11,185	.00	206.02	2,262.25
Rosewood.....	Juglans nigra.....	9,000	.00	63.56	572.00
Black walnut.....	Juglans cinerea.....	8,000	.00	55.00	440.00
Padouk.....	Chamaecyparis thyoides.....	5,000	.00	250.00	1,250.00
White cedar.....	Leatherwood.....	1,200	.00	20.00	24.00
Lignum-vitæ.....	Goniacum officinale.....	785	.00	347.26	272.60
Kokko.....	Albizia lebbek.....	500	.00	120.00	60.00
Butternut.....	Juglans cinerea.....	500	.00	35.00	17.50
Circassian walnut.....	Juglans regia.....	125	.00	285.00	37.00
Teakwood.....	Tectona grandis.....	125	.00	275.04	34.38
Totals.....		422,903,561			\$8,159,469.50

* Less than 1/10 of one per cent.

The report is well arranged and edited, and information concerning any wood or any industry may be readily found. This feature, which is too often neglected in compiling industrial reports, is of special value. Few people have time to read through a report, but persons are nearly always interested in certain parts and will turn to them when it can be done conveniently and quickly.

The woodworkers of New Hampshire do not neglect small commodities, and many instructive details are shown. The state has most of the industries which are commonly found in a woodworking region, and some which are rather unusual. For example, few states support a crutch industry, though it is a commodity widely used. New Hampshire utilizes 590,000 feet in producing that article. The crutches are shipped into nearly every state, to Canada, and to most European countries. About 250,000 pairs are made yearly, and it is not believed that any other state produces as many. About two feet of lumber go into a pair of crutches. Yellow birch leads in quantity, followed by paper birch, sugar maple, hickory, lancewood, rosewood and cherry. About nine-tenths of the wood grows in New Hampshire.

It is worthy of note that the manufacturing of agricultural implements is a smaller industry in New Hampshire than crutch-making. The principal thing manufactured was hayrakes. The teeth are made of hornbeam and leatherwood. The identity of the latter wood is not clear, but it is probably foreign, though it costs only \$24 a thousand feet.

It is worthy of comment that flails, grain cradles and scythe snaths do not seem to be manufactured in New Hampshire. It is a mountainous region with many small, steep and rocky farms, and these old-style but highly useful articles of husbandry were to be expected there.

"Refrigerators, hames and musical instruments" are grouped as one industry, with the explanation that each is too small to be considered separately. The explanation is satisfactory, particularly when it is observed that hames are used in this instance to hitch together two quite different industries.

The following table shows the yearly demand for wood by manufacturing industries of the state:

INDUSTRIES.	Total quantity used annually.		
	Feet b. m.	Average cost per 1,000 ft.	Total cost f. o. b. factory.
Boxes and crates.....	199,074,596	\$16.47	\$3,279,116.87
Planing mill products.....	84,882,862	17.39	1,476,446.31
Sash, doors and general millwork.....	31,152,300	26.75	833,367.27
Car and boat building.....	19,786,000	32.03	633,758.00
Woodenware.....	18,940,614	14.85	281,357.79
Refrigerators, hames, etc.....	14,355,521	42.92	613,763.22
Excelsior.....	11,912,000	12.54	149,350.80
Shuttles, spools and bobbins.....	11,706,000	17.89	209,377.50
Chairs.....	6,515,280	19.25	125,525.30
Furniture.....	4,599,800	21.42	98,530.50
Laundry appliances.....	3,294,000	16.35	54,814.00
Vehicles.....	2,983,350	27.73	82,741.70
Plumbers' woodwork, insulator pins, etc.....	2,566,000	16.19	41,549.00
Shoe finding.....	2,512,000	14.44	36,116.50
Fixtures.....	1,600,326	44.05	71,095.11
Instruments, professional and scientific.....	1,170,700	22.17	25,936.00
Baskets.....	1,135,000	24.22	27,488.00
Handles.....	924,000	23.58	21,756.40
Brushes.....	641,500	26.12	16,771.95
Sporting and athletic goods.....	616,000	26.55	16,350.00
Crutches.....	594,000	36.38	21,467.00
Agricultural implements.....	589,200	17.96	10,582.00
Toys.....	724,032	17.34	12,636.58
Miscellaneous.....	632,500	30.91	19,551.70
Totals.....	422,903,561	\$19.29	\$8,159,469.50

It is stated that the manufacture of shuttles requires twenty-two separate operations, not counting what takes place in the forest and at the sawmill where the squares are prepared. More shuttles are made of persimmon than of any other wood, but much dogwood is employed. These are regarded as the best shuttle woods of the

United States and inferior only to Turkish boxwood, which has become so expensive that shuttlemakers cannot use it.

In New Hampshire many woods are used for spools. Most of the one-piece spools are of paper birch, but varying amounts of other birches and maples are used. White birch, which in England is often called oldfield or poverty birch, is coming into use as spool wood. This is a matter for congratulation, for it has generally been looked upon as somewhat of a nuisance where it grows in great abundance, on account of its small size and its habit of overrunning the country.

Chair makers use more red oak than any other wood; beech is second, and sugar maple a close third. Most of the white oak reported was shipped in from the Ohio valley. Half a million feet of chestnut went to the chair factories, much of it going into mission pieces. Its fuming qualities are higher than most woods. Throughout New Hampshire factories generally red oak is more important than white oak. It costs more and more is used. Chair makers often stain them and ash to imitate oak.

The clothespin factories are kept busy with beech. Birch and maple are used also. Half a million bent rims for bicycles, automobiles and racing sulkies are made yearly. Sugar maple, yellow birch and beech are the woods used, with maple leading.

New Hampshire is strong on shoe pegs. About 2,500,000 feet of paper birch is used yearly in producing this commodity. The wet pegs are treated with sulphuric acid and are then tumbled and sorted to size then, from splinters. They are measured by the bushel.

White pine to the extent of about 11,000 feet a year is manufactured into "tongue depressors." This article has nothing to do with wagons, as might be inferred from the name, but is a small instrument of late invention used by doctors in examining throats of patients. They formerly used a silver instrument, but for sanitary reasons that has been discarded and those of cheap pine have been substituted. The article is used only once and is then destroyed.

New Hampshire manufacturers found out in some way that aspen makes a capital handle for an oyster-shucking knife, because it is absorbent and never becomes slippery. They have built up a little industry in making such handles. About 20,000 feet of aspen is used yearly, which is good for 300,000 handles, which would seem to be sufficient to supply the shuckers of forty states. Vast numbers of very small handles of other kinds are made, such as those for shoe knives, gimlets, corkscrews, curling irons, awls, screwdrivers, dip-pers and pails. Makers of handles for rakes, hoes and shovels in New Hampshire are using beech, birch and maple, while makers of these articles in the South and West depend largely on aspen.



Experimental Kiln-Drying



The Forest Service has issued bulletin 104, from the laboratory at Madison, Wis., dealing with the principles of drying lumber at atmospheric pressure. It is the work of Harry D. Tieman, in charge of timber physics. It pretends to be nothing more than an investigation of principles which govern the proper drying of lumber in kilns. It is stated that the series of experiments has not yet been completed, and that this bulletin is a progress report issued to answer numerous inquiries which are being constantly received at the laboratory.

Mr. Tieman has built a sample dry-kiln for carrying on experimental work. It is constructed with complete apparatus for regulating the temperature, governing circulation of air, and controlling the degree of moisture maintained in the air. He has been granted four patents on his processes, and these patents have been dedicated to the public, so that whatever good there is in them will be free to whoever wishes to use them.

The bulletin is both practical and technical. Part I deals with the subject in the ordinary language of lumbermen; while Part II is evidently intended for engineers who wish to make a thorough scientific study of the principles involved.

What the author calls the basic principles of kiln-drying are set down as follows:

Timber should be heated through before drying begins.

Air should be very humid at the beginning of the drying process, and be made dryer only gradually.

The temperature of the lumber must be maintained uniformly throughout the entire pile. For this an exceedingly large circulation of air is essential.

Control of the drying process at any given temperature must be secured by controlling relative humidity, not by decreasing circulation.

In general, high temperatures permit more rapid drying than do lower ones. The higher the temperature of the lumber, the more efficient is the kiln. It is believed that temperatures as high as the boiling point are not injurious to most woods, provided all the other fundamentally important factors are taken care of. Some species, however, may not be able to stand as high temperatures as others.

The degree of dryness attained, where strength is the prime requisite, should not exceed that at which the wood is to be used.

When the wood can stand the heat without detrimental effects for the intended use, preliminary steaming, not in condensed but in live steam, is beneficial.

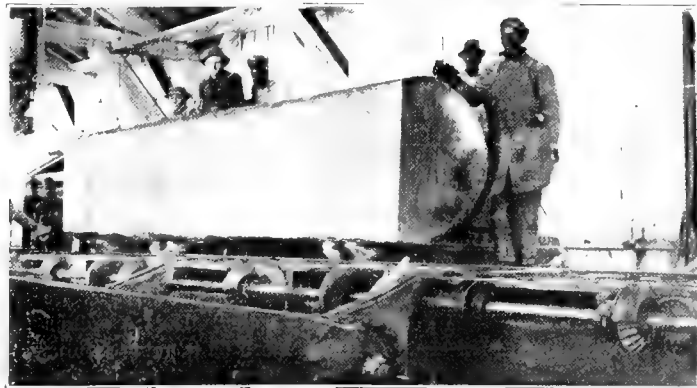
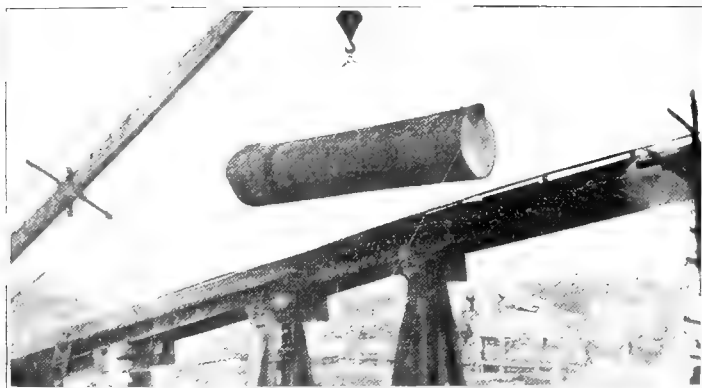
The pressure and duration of steaming desirable in kiln-drying are

points which have not yet been thoroughly worked out. From five minutes to twenty-four hours, or even longer, and pressures ranging from atmospheric to fifty pounds gauge have been used in practice. The higher the pressure, the greater is the effect produced, and the longer the time, the more thoroughly the treatment penetrates the wood. Experiments have shown that a pressure slightly above atmospheric for twenty-four hours is sufficient to slightly darken two-inch maple clear through, and a pressure of forty pounds that length of time will turn oak, and probably other hardwoods, almost black. The organic materials or sap in the wood are changed by cooking, and apparently some undetermined chemical change takes place. This is indicated by the fact that the color of the wood is darkened, the degree of coloring depending upon the temperature and duration of the process; and that the wood when subsequently dried has lost some of its original weight and is less hygroscopic. The change in hygroscopicity is beneficial for some purposes, as it reduces swelling and shrinkage of the wood. Very rich color effects are produced in hardwoods by sufficient steaming. Any well-made kiln which will fulfill the conditions required as to circulation and humidity control should work satisfactorily; but each case must be studied by itself and the various factors modified to suit the particular conditions of the problem. In every new case the lumber should be constantly watched and, if checking begins, the humidity should be increased until it stops. It is not reducing the circulation, but adding the necessary moisture to the air, that should be depended on to prevent checking.

The free water in green wood may be driven off rapidly by heating the wood to the boiling point and supplying the heat necessary for vaporization. This will not injure the wood, provided it is done in nearly saturated vapor; hence the applicability of superheated steam in drying lumber.

Progress of Forestry

Thirty out of forty-seven states have laws relating to forestry in some form or another. In the remaining seventeen no provisions whatever are made along this line. Out of the first thirty, seventeen have placed the administration of the forestry work in the hands of trained foresters. Best results are secured where the forester's office is kept untainted from political patronage. There are seven states which accomplish this by having the forester appointed by a non-political board of forestry. They are California, Kentucky, Maryland, Minnesota, Vermont and Wisconsin.



Oak of Size and Character

In this day of closer timber cutting and the handling of cut-over lands and inferior timbered areas, it is becoming quite a rarity to find oak of the surpassing quality that is shown in the accompanying illustrations. **HARDWOOD RECORD** has secured from the Paepeke-Leicht Lumber Company of Chicago these photographs which depict the splendid red oak lumber product that it is securing at the present time from its virgin timber tributary to its Blytheville, Ark., operation.

Illustration No. 1 shows a sixteen-foot red oak log that contained 1,444 feet.

Illustration No. 2 shows the same log on the carriage in the mill. This log developed seventy-two per cent of No. 1 common and better lumber. A specimen of the product is shown in the two longer boards in the picture in the center of this page.

Illustration No. 3 shows a fourteen-foot red oak which is again shown on the carriage in the sawmill in the fourth picture. This log developed 1,272 feet of lumber of which seventy-three per cent was No. 1 common and better. Two of the clean planks out of this log are shown in the middle illustration.

E. A. Lang, manager of the lumber department of the Paepeke-Leicht Lumber Company, Chicago, says that his company never has had a better class of logs than it is working on at the present time, not only in its oak but also in red gum and cottonwood. It goes without saying that lumber of the type being produced by this company is meeting with a ready sale at very satisfactory prices.

In all the history of oak production there apparently never was such a shortage of stock as at the present time.

Artificial Ebony from Oak

A consul in France gives the following process for converting oak wood into artificial ebony:

The blocks of wood are immersed forty-eight hours in a warm saturated solution of alum and sprinkled several times with a decoction of logwood. Smaller pieces may be steeped for some time in the decoction, which is prepared in the following manner: One part of logwood of best quality is boiled with ten parts of water. It is then filtered through linen and the liquid evaporated at low temperature until its volume is reduced by one-half. To every quart of this bath is added ten to fifteen drops of a saturated solution of soluble indigo. After having watered the block several times with this solution, the wood is rubbed with a saturated and filtered solution of verdigris in warmed concentrated acetic acid. This operation is repeated until a black color of the desired intensity is obtained.

The Canadian Railway Commissioners have disallowed the increase of cartage rates on freight proposed by the railway companies to be effective in Eastern Canada. The companies may impose rates not exceeding two and a half cents per hundred pounds and the minimum toll charge for any complete single shipment shall not exceed fifteen cents. This increases the rate by half a cent per 100 pounds in place of one cent.





Impressions of a Tenderfoot



First Paper

I have been "out West."

To be sure, I know I am not the first lumberman or a better newspaper man who has gone on a tour of discovery to the Pacific Coast, and without any assumption that my impressions, analyses and deductions are in any wise accurate, it is just possible that they may interest *HARDWOOD RECORD* readers.

It so happened that a couple of citizens of the effete East made a similar trip some years ago, and in the smoking compartment of the Pullman encountered a group of typical Pacific Coast boomers. The two friends listened to the conversation that prevailed. They heard recited details of stupendous enterprises in which the figures ran up into the billions in both quantities and dollars, and they glanced at each other and shook their heads. They got glimmering verbal vistas of stupendous reclamation projects, the irrigation of principalities, wonderful development in mines, stupendous timber areas, marvelous propositions in lumbering, mining, etc. They were interested but astounded by the figures and the alleged facts presented.

It so happened that the two tenderfeet dropped in to dinner at the restaurant of the Washington hotel at Seattle on their arrival at this city, and saw sitting at an adjoining table the bunch of exploiters. Being interested in the culinary possibilities of the Coast, the two friends listened to the order being given the waiter by one of the "barkers." He said to the white-aproned attendant: "Bring me twelve dozen oysters."

One friend turned to the other and observed: "Bill, they're just as big eaters as they are liars, ain't they?"

The nub of this story hinges on the fact that a native Pacific Coast oyster is a coppery-flavored bivalve about the size of a hazel nut.

This anecdote simply makes a basis for the prejudice that gets on the nerves of the conservative easterner as he hears the resounding, glittering and reiterated praises from every citizen of the West concerning the land in which he is a visitor. Every last man in that country is a "booster." To his mind there is no region on earth like the Inland Empire and the Pacific Coast. Its resources, its possibilities, its wonders, its climate, its soil, its inhabitants, its crops, its fruit, its flowers, and everything else concerning it is thrown at you from daylight until bedtime. Of course, you must believe part of the stories that reach you, but all in all it looks to a tenderfoot like a gigantic game of promotion.

And still—they are doing wonderful things in the Inland Empire and the Northwest. There are lots of features that appeal to the stranger. Primarily, in due course of nature it is not an alluring land, the soil is not marvelous, even with the aid of water obtained from the mountains by means of irrigation ditches; the climate is not good—it's either too cold or too hot—too wet or too dry. There is nothing alluring in the landscape, it's cold, it's rugged, it's depressing, but these people of the Inland Empire and the Pacific Coast are doing wonderful things, and every last man is a "boomer." He preaches the gospel of the Great West day in and day out, and the visitor can't fail to be impressed by his enthusiasm and his earnest belief in the fact that he thinks he is telling the truth.

They are doing great things in this country. They are building good towns with good buildings. They are building splendid school houses. They are building fine streets. They are equipping themselves with electric light and electric transportation facilities. They are building monster conduits for water which they are getting out of the foothills of the mountains. They are really making a semi-arid country productive. They are raising grains, fruit, flowers. They are building substantial and handsome homes. Yes, they are doing wonderful things in the Inland Empire of Montana, Idaho and western Washington as well as along the entire length of the Pacific Coast.

The lumber operations are generally on a stupendous scale.

There are comparatively few small operators. Timber holdings generally run up into the billions of feet. They are manufacturing lumber fast, but only reasonably well. They seem to have very little idea about the finer manipulation, seasoning and utilization of their product, but they are crowding the game for all it is worth, and are making what money they can out of it, and doing it as promptly as possible. The general lumber proposition is almost a duplicate of that which obtained in Michigan and Wisconsin a quarter of a century ago, only it is being done on a bigger scale and faster. As a general proposition it doesn't look particularly alluring to the conservative eastern lumberman. Not only is the lumber business growing too fast, but the general expense account is too big a factor.

The foregoing statement is a general proposition, and by no means intended to be specific, because there are sagacious and experienced lumbermen in that region who have a system embracing low cost and high efficiency that is scarcely excelled in any other part of the United States.

Referring specifically to the region known as the Inland Empire, which forms a source of supply to the general consuming building world markets of the East, a high freight rate obtains, not very much less than from the Coast. Apparently the real salvation of anything like money-making in the lumber business results from the local demand and the business developed in the nearby territory of Alberta and Saskatchewan. Of course, it is well known that marvelous things are being done in the way of developing the gigantic agricultural provinces immediately north of the Inland Empire, and a vast quantity of low-grade lumber is being marketed in that region. The good end of the lumber product (the so-called western pine, white pine and larch) apparently "can stand the freight" of the long eastern shipments, but the percentage of this good end of stock is comparatively small.

There are quite a number of things that contribute to this hurried and on the whole rather careless lumber production in the Inland Empire and the Pacific Coast. Lumbermen in the East scarcely realize the immediate, almost constant fire hazard that obtains in that region. Every timber owner is sitting on a powder magazine knowing not at what instant his big holdings will be fire swept. He is crowding the game to get what he can get quickly out of his timber holdings rather than take the chance of fire depredations.

Again, with the stupendous internal improvements prevailing, taxation is not an unimportant item. It costs money and big bunches of money to hold an important timber area in the Inland Empire or on the Pacific Coast. The timber may have been purchased almost for a song, but the cumulative cost, resulting from constantly increased taxation, very quickly builds up a scale of stumpage valuation that impels the operator to work fast and put his timber into lumber as quickly as possible.

Back of all these timber holdings again are the immense areas of government timber. This delightful paternal government of these United States holding that it should do everything possible to "hold down the cost of living," of which house-building is an important feature, and that furthermore its timber is ripe and ready for the saw, piles on top of operators more and more timber. In short, it is a matter of over-production, and under existing policies there seems to be no possible chance that timber owners in this region are going to have an opportunity to hold timber back as an investment, reach high efficiency, low cost of production, or refrain from excessive production until the whole region is depredated of its forest wealth. The whole scheme doesn't look good to the conservative tenderfoot.

At an earlier date mining enterprises in which there are untold millions invested, and timber properties in which there are other untold millions involved, were the principal commercial projects of this region. Now the game is going over to agriculture and

fruit-growing as the important features of the land. Every big and little town has its score to hundreds of land promotion enterprises of all sorts and descriptions—good, indifferent and bad—and it requires pretty nearly an agricultural genius to differentiate one from the other. Agricultural land values, through the aid of this booming element, are on a basis that looks wild in price to the self-same eastern conservative tenderfoot. Prices of sod-turned prairie and stump lands are scheduled at values of from fifty to three hundred dollars an acre, which when ready for crop raising, bear in mind, entail an added expense of nearly as much more, and in the case of irrigated properties an annual tax against these lands for water, which are thousands of miles away from the principal consuming markets of the world.

Again, it doesn't look good to the amateur tenderfoot from the East.

It is a tremendously big proposition. It's so stupendous in distance, in money, in general investment, in boom and in alluring talk, that it fairly makes the eastern tenderfoot dizzy to consider it. It requires courage to do the stupendous things that these western boomers are actually doing. It requires courage to even spend their own time and talent to boom it. The money being

invested out there doesn't grow there—yet. It has been coaxed into these enterprises, and it has required talent to coax it. Hence, these people have talent and lots of it.

Which is reminiscent of another story.

A quarter of a century ago I was a visitor in a northern Florida city, which has since attained considerable size and commercial prominence, but which I must confess in those days didn't look very much better to me than some of the regions of the Inland Empire and the Pacific Coast, which I have recently visited. After spending some days in the town looking it over very carefully I said to a friend of mine: "Will you kindly explain to me what you people live on down here?"

He very frankly replied: "On fish—and northern people."

Inasmuch as there is no plethora of fish in the Inland Empire I have, in the face of the rather hurried visit and analysis I have made in this country, come to the conclusion that this region lives almost exclusively on eastern people. I confess I was wrong in my analysis and deductions concerning Jacksonville, Fla., and probably am just as wrong now, but then I am more or less of a back-number, and this game out in the Inland Empire is too swift for me.

H. H. GIBSON.



1911 Lumber Cut by States



A preliminary report showing the production of lumber, lath and shingles by states for 1911 has been issued by the Census Bureau at Washington. This covers also the calendar years of 1910, 1909 and 1908. The reported cut since the banner year of 1909, when there was a total cut of 44,509,761,000 feet, has fallen off gradually, being in 1910 40,018,282,000 feet and in 1911, 37,003,207,000 feet.

The report for 1911 was based on returns from 28,107 mills; for 1910 on reports of 31,394 mills; 1909, 48,112 mills, and 1908, 31,231 mills. The data for 1911, 1910 and 1908 was gathered by correspondence, and while including the cut of practically all of the larger or commercial plants for these three years, did not cover the operations of many of the neighborhood or custom mills. Furthermore, the cuts for 1911 and 1910 did not include the output of any mills which reported a product of less than 50,000 feet during these years.

The figures for 1909 were collected by special agents of the census office in connection with the regular census, and hence covered every lumber producing establishment which was in operation during the whole or any part of that year. On the other hand, there were about 4,500 mills reported cutting less than 50,000 feet that were omitted from the reports of 1911 and 1910. The decrease in 1911 as compared with 1910 of about 4,000 mills and 3,000,000,000 feet board measure of lumber, was doubtless due in part to a delay of about two months in mailing the schedule cards to the manufacturers during 1912.

It is further interesting to note that 36 per cent of the total cut was reported from the five states of Washington, Louisiana, Mississippi, Oregon and North Carolina, ranking in the order named.

The cut in Washington remained almost exactly the same as in 1910. Louisiana declined nearly two hundred million feet, Mississippi about eighty million, Oregon nearly three hundred million, and North Carolina about twenty-five million. A study of the accompanying table will show that no state made much advance in the amount of the cut over that of 1910, and that the only states making any advance were Arizona, Idaho, Minnesota, New Mexico, New York, and West Virginia.

The five leading species cut in 1911, ranking in importance in the order named, were yellow pine, Douglas fir, white pine, oak and hemlock. The aggregate output of these woods was 72.5 per cent of the total production of all species. Oak, the leading hardwood, contributed 3,098,444,000 feet or 8.4 per cent of the total.

The following is a summary of the report:

LUMBER PRODUCTION (M FEET BOARD MEASURE)

	1911	1910	1909	1908
Washington	4,064,754	4,097,492	3,862,916	2,915,928
Louisiana	3,566,456	3,733,900	3,551,918	2,722,421
Mississippi	2,041,615	2,122,205	2,572,669	1,861,016
Oregon	1,803,698	2,084,633	1,898,995	1,468,158
North Carolina	1,798,724	1,824,722	2,177,715	1,136,796
Arkansas	1,777,303	1,844,446	2,111,300	1,656,991
Wisconsin	1,761,986	1,891,291	2,025,038	1,613,315
Texas	1,681,980	1,884,134	2,099,130	1,524,008
Minnesota	1,485,915	1,457,734	1,561,508	1,286,122
Michigan	1,466,754	1,681,081	1,889,724	1,478,252
West Virginia	1,387,786	1,376,737	1,472,942	1,097,015
Virginia	1,359,790	1,652,192	2,101,716	1,198,725
Alabama	1,226,212	1,465,623	1,691,001	1,152,079
California	1,207,561	1,254,826	1,143,507	996,115
Pennsylvania	1,048,606	1,241,199	1,462,771	1,203,041
Florida	983,824	992,091	1,201,734	730,906
Tennessee	914,579	1,016,475	1,223,849	790,642
Maine	828,417	860,273	1,111,565	929,350
Georgia	801,611	1,041,617	1,342,249	904,668
Idaho	765,670	745,984	645,800	518,625
Kentucky	632,415	753,556	860,712	658,539
South Carolina	584,872	706,831	897,660	560,888
New York	526,283	506,074	681,440	781,391
Ohio	427,161	490,039	542,904	459,259
Missouri	418,586	501,691	660,159	458,938
New Hampshire	388,619	443,907	649,606	606,760
Indiana	360,613	422,963	556,418	411,868
Massachusetts	273,317	239,206	361,200	384,526
Vermont	239,254	284,815	351,571	304,017
Montana	228,416	319,089	308,582	311,533
Maryland	144,078	154,554	267,939	168,534
Oklahoma	143,869	164,663	225,730	158,756
Connecticut	124,661	126,463	168,371	137,855
Illinois	96,651	113,506	170,181	123,319
Colorado	95,908	121,398	141,710	117,036
New Mexico	83,728	83,544	91,987	79,439
Arizona	73,139	72,655	62,731	43,287
Iowa	59,974	75,446	132,021	97,242
Wyoming	33,309	30,931	28,602	18,822
New Jersey	28,639	36,542	61,620	34,930
Delaware	23,853	46,642	55,440	41,184
South Dakota	13,046	16,340	31,057	25,859
Utah	10,573	11,786	12,638	15,059
Rhode Island	9,016	14,392	25,489	30,528
All other states.....	11,786	12,594	15,946	10,627
United States.....	37,003,207	40,018,282	44,509,761	33,224,369
Lath (thousands)	2,971,110	3,494,718	3,703,195	2,986,684
Shingles (thousands)	12,113,867	12,976,362	14,907,371	12,106,483



Lumber and Shipbuilding in Scotland



Before the "wooden walls of Old England" gave place to vessels constructed of steel, a boom in the shipbuilding trade always meant a boom in the timber trade as well. Now, conditions are different, and although the shipyards of the Clyde are experiencing a period of industrial activity, that is almost unprecedented, the timber trade of the west of Scotland is still far from experiencing that revival which has been looked for so long. For many months the trade has not found conditions of too satisfactory a character, and improvement seems to come slowly.

The best outlet for timber has, of course, been the shipyards, for though the metals now enter so largely into the construction of boats, huge quantities of woods of various qualities and descriptions are also required for the making of decks and for many other obvious purposes. Indeed but for the steady flow of orders from shipbuilders, the timber trade would frequently in the past year have been in a condition bordering upon stagnation. It is therefore a comfort to those engaged in the business of woods to know that for many months to come busy times will continue to prevail at the shipyards, and that consequently from that direction, at any rate, there is not likely to be any cessation in the active volume of orders. Some of the larger liners at present being built on the river and others in prospect have meant very large orders for timber in the market, and if other consumers could only have been put in a position to put forward a similar request, the timber trade would now find itself in a decidedly cheerful condition.

The shipbuilding boom is due to the expansion of overseas trade. Shipowners having passed through a long period of depression found that the supply of tonnage, which unfortunately for them was over adequate for the requirements of shippers, was insufficient in face of the increasing overseas trade demands. Such a situation of course means, first, the placing of new orders and, second, a rapid rise in the freight market. The competition for ships has been so keen that it is not surprising that freights have had such a steady upward tendency. It may be asked what of the immediate outlook? Will the present prosperous condition of trade last, or will it begin to dwindle and show a serious shrinkage in the next few months when the large number of cargo steamers at present under construction are ready for the sea. An examination of the principal factors in the situation leads to the belief that the present advantageous times for shipping trade have come to stay for awhile. In brief, the various signs and portents go to show that the demands upon shipping in the months that are ahead will still be enormous. The question of the high rates of freight that now rule are a pretty accurate barometer of the encouraging position in which the shipping trade finds itself. From a ship-owner's point of view one of the most interesting developments of the early future will be the opening of the Panama canal. It is fraught with enormous possibilities for the shipping trade, but first there is the question of the treatment of the ships of this country compared with American tonnage to be settled.

Before touching upon some of the trades whose lack of activity is reflected in the quietness of timber, it is advisable to mention the manner in which labor troubles have this year affected the market. First there was the lockout of the dock laborers at the beginning of February. Business at the harbor was in consequence brought to a standstill and the impossibility of unloading ships containing cargoes and consignments of timber from across the seas inconvenienced the trade to a very serious extent. Happily the dockers' trouble was not of very long duration, but coming quickly upon its heels was the national strike of the coal miners, and, like almost every other important industry in the country, timber interests found business brought practically to a full stop. Considerable difficulty was experienced in delivering supplies at the shipyards; then after a time some of the sawmills were forced to close down through lack of fuel, and, to allude to only one of many other directions in which the timber trade was made to feel the pinch, the demand for pitprops, which is always so lively when

operations are in full swing in the country collieries, fell off to infinitesimal proportions.

The present state of the timber trade of the west of Scotland depends to a very fair extent upon the condition of the house building trade. It is hardly necessary to remind readers of the long period of depression through which house-building has passed. Another notable class of wood consumers is that of cabinet-makers and furniture manufacturers generally. In 1911, with a distinct scarcity of orders, and somewhat unremunerative prices, a rather poor year was experienced. The present year opened none too promisingly, but in recent times the outlook has undergone some improvements.

Neither last year, nor this year, has the packing case trade enjoyed anything in the nature of a boom. Sporadically conditions have been busy, and the timber merchants thereby have received little spurts in the volume of orders from time to time, but there has been an unfortunate lack of strong and steady demand. A fair business has been done this year by wagon and carriage builders, though here it has been of a quiet and unexciting character.

For a considerable part of the season the import of wood from Montreal was unusually light, though an exception is provided in the case of birch logs. Surprise has been caused by the paucity of the request for Canadian pine. It has been almost directly directed towards first-class wood suitable for decks, the demand for which, during the opening months of the year was quite good. For other varieties the inquiry has been meager. The outlet for Canadian elm has fallen short of the average, this being attributed to the fact that transactions have been confined within the narrow limits of the small stock on offer, as well as to the stiff quotations in vogue. In the case of birch logs, although as already indicated, the import has been large, it has been speedily absorbed, owing to the low levels merchants' stocks had reached. In contrast to prices for most other woods, values of birch logs have been inclined to sag. The import of spruce has been the lightest known for a considerable time. The freight market had practically all to do with this. Shippers would not risk cargoes, always anticipating a fall in rates. However, supplies from the Baltic were quite numerous and from this direction buyers fulfilled their requirements. The pitch pine market also suffered from the freight situation. Record prices were quoted and paid and those who contracted for supplies at the time when freights first advanced have found it very much to their advantage.

From the foregoing it will be understood that there has been much wanting in the timber market for some time past. The situation from the trade's point of view, however, has not been without its gratifying features. Throughout all these months of restricted demand, prices have preserved a remarkably firm front. This is in some way due to the strength of the statistical position, the stocks on hand having been for the most part low. Indeed, in almost all cases where changes in prices have taken place they have been of an upward character. In staples such as pitch pine and spruce the advances in quotations have been quite substantial.

As to the outlook for the timber trade, it has been shown that it has nothing to fear from the score of shipbuilding. While the laying down of new warships is of comparatively little interest to the trade, owing to the character of the material used for these vessels' construction, the high pressure prevailing in the shipyards in regard to new tonnage for the mercantile marine is of first rate importance, owing to the large amount of wood our modern leviathans in this age of steel require. There is less comfort for the trade in the prospects of house-building and some of the other wood consuming industries enumerated, but whatever happens these are not likely to go backward. The probability seems rather that they will improve. The anomaly of good prices when trade is disappointing is not in the least likely to be followed by the anomalous situation of good trade and disappointing prices.



Passing of the Country Mill



A group of hardwood lumbermen, largely composed of wholesalers, were discussing recently some of the changes in the business which have been wrought with the passing of the years. Most of them were intimately acquainted with the hardwood producing sections of the Central South, and easily recalled the time, not so far distant, when more than half of the lumber offered on the hardwood markets was made up of the product of the so called "country mills."

"How much lumber do you suppose the little fellows put out now, compared with the total?" inquired a newcomer in the trade, who had listened to the talk with keen interest.

"Not more than twenty per cent, if that," said one of the veterans. The others agreed with him, and the inquirer made a mental note of the fact, presented to him for the first time, that the country mill, as a factor in the commercial situation, is rapidly disappearing. The figures quoted are the estimates of practical men based on their own experience in the handling of hardwoods, and are not the result of a statistical investigation. Nevertheless, it is fairly safe to assume that the proportion is just about as indicated.

The small portable mill, with a boiler, circular saw and little other equipment, is not going into the junk-pile, by any means; it is still working here and there, but it hasn't nearly as much material to work with as it used to have. In Kentucky and Tennessee the timber is getting pretty scattered, and in the districts further south the timber is being manufactured at the big, substantial mills where band-saws predominate.

It is generally agreed that the character of lumber manufactured by the band-mill is an improvement over the circular-sawed stock of the country mill, though many jobbers of hardwoods who handle the output of the latter contend that in many respects the little fellow has it on his larger competitor. For one thing, they argue, the absence of edgers and trimmers at the country mill means that the buyer gets the advantage of width and length which is lost when the manufacturer having those facilities cuts the stock with reference to grade.

On the other hand, the argument is very properly made that this apparent advantage is in fact none at all, since the buyer in order to make use of such stock, must necessarily trim off the bark and equalize the thickness, so that by the time he has added labor and handling charges to the lumber he is no better off than he would have been if he had bought the band-mill's even, well manufactured stock.

This is not to say that the circular saw is not capable of manufacturing good lumber. On the contrary, if such a saw is in good condition and is properly handled, the lumber turned out of it may be as perfect as the product of any other type of mill. But under the conditions which prevail in most cases, where the millman does custom sawing for the timber owners of his community, and bangs his equipment here and there, setting it up in the woods wherever he can get a customer, it is practically impossible to keep it going in the best possible fashion, and while it makes lumber, it is just about lumber and little else.

Indicating the incompleteness of the operation, many band-mill operators which purchase the product of the country mills in their vicinity make a practice of going over this stock and sorting out the boards which should have been edged or trimmed or equalized, and sending them over to the mill for re-working. This results in better lumber for the manufacturer's purpose being produced, and while it raises the grade and thereby enables the lumberman to market it to better advantage, he merely takes a legitimate profit growing out of his possession of complete facilities for producing lumber. It is therefore likely that the consumer who buys country stock expecting to make a big economy merely because he is likely to get longer and wider boards, will probably have to make up for it in the labor expense which is necessary to put it into the best possible condition.

The transfer of the balance of power, so to speak, from the numerous small millmen to large interests controlling modern, permanent

and well equipped mills, has meant more to the industry and to the consuming trades than merely a change of control. It has made possible the production of better lumber and the practice of economies which were entirely out of the range of possibilities with the small mill in possession of the field for the most part.

Take for instance the matter of applying industrial chemistry to the utilization of the waste products of the hardwood mill. Attention has been called from time to time to the exploits in the pine field, where paper, alcohol, acetic acid and other valuable products have been evolved from the unpromising base of shavings, slabs and sawdust. The hardwood mills are now installing burners and expensive conveying systems for moving their waste; the problem is simply how to get rid of it, and not how to make money out of it. These big mills have not yet taken advantage of their opportunities, but are seizing upon the first method that offers itself. They are big enough and strong enough financially, however, to undertake a little research work in this direction, by means of which to find an outlet for their waste which will enable them to transfer it from the expense to the profit account and change it from a liability into an asset.

This would seem to be one of the greatest possible benefits that may come from the production of the major portion of the hardwood output by large mills backed by strong interests, instead of by peripatetic country mills working chiefly on a custom basis and unable to complete the manufacture of the lumber, as judged by present day standards, much less make use of the waste created in their operations.

Then, of course, the production of dimension stock is possible in the big mill, whereas it is out of the question at the country plant. As this is now regarded as a department of the hardwood business offering the greatest possibilities from the general standpoint of economy in the use of wood, and also as judged by standards of individual profit and convenience, making it possible to handle an increased percentage of the output on this basis it must be regarded as a step in the right direction.

The erection of the big mill might have been thought to be the knell of the jobber who formerly had received most of the output of the country mills of his district. Apparently, this has not happened; though possibly the result has been to turn the jobber into a manufacturer by making it worth while for him to put up his own mill, and the manufacturer into a jobber by suggesting the purchase of the lumber cut at the country mills still remaining. As much lumber as ever is passing through the hands of middlemen, it seems, so that the existence of the system which has been railed at so much by the theorists in the field of political economy of late is probably not endangered.

A feature of the situation as it affects the country mills has been referred to by wholesalers buying from them. For a long while, with a large part of the hardwood country forested, the population was rather scanty and the local consumption of wood relatively small. Today, with most of the country devoted to farming and only an occasional strip of woodland left, the demands of the immediate vicinity of the mill are sufficient to take care of a large percentage of the production. This is especially true of low-grade material, which goes into the manufacture of barns and buildings of all kinds. The local millman can get more for his low-grade stuff, used in this way, than from the jobber, who consequently buys very little except firsts and seconds and No. 1 common, whereas he used to take the lumber either log run or contract for the entire output on a basis of grades.

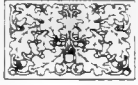
The development of agricultural and community interests in the hardwood producing districts may account in part for the shortage of low grades which has been noted during the past few years, and which has resulted in advances in prices on this character of stock all the way through the hardwood stock list. While this affects the country mills chiefly, the big mills are in somewhat similar circum-

stances, through the increased local development of their sections, and also through the establishment of consuming plants, such as flooring factories, in their immediate vicinity, taking a large part of the No. 1 and No. 2 common production.

The schedule furnished by a timberman who recently cut nearly a million feet of oak in western Kentucky by means of portable sawmills may be interesting to those who like to see how costs work out under the old system. He arranged matters so that it cost him \$12 a thousand to get the lumber from the tree to the wharf on the Ohio river where it was loaded for delivery to the buyer, who purchased it f. o. b. the steambent. The charges were divided as follows: Cutting, \$1; log hauling, \$2; sawmill, \$4; hauling lumber, \$5.

The timberman is satisfied that the sawmill, with an investment of a few hundred dollars in equipment can make a pretty tidy profit on his business, especially when it is remembered that he has no worries as to buying the timber, logging it or selling the product, but simply cuts the logs into lumber as they are brought to him. There are some of the big commercial mills which would like to work on the same kind of basis if it were possible.

G. D. C. 11.



U. S. Forester's Annual Report



The annual report of Henry S. Graves, chief of the Forest Service, has been published. It covers the fiscal year ending June 30, 1912, and contains much that is of interest to lumbermen and those who are concerned with forests, though it deals principally with government land.

The net area of all the national forests in the United States is 138,350,928 acres, and in addition Alaska has 26,643,260 acres, and Porto Rico 32,975.

The whole force employed to care for this forest area and the business connected with it is 2,895 persons. These include supervisors and deputies with headquarters in the forests; rangers and guards who do the patrolling and lookout work; and examiners, assistants, lumber and mining experts, hunters, and clerks.

The money appropriated by Congress for the year 1912, and that received from other sources, totaled \$6,540,861.31. The total expenditure for all purposes from the years 1900 to 1910, both inclusive, was \$18,712,181.03.

It is shown that the annual growth of timber on the national forests is, or would be if properly cared for, 6,000,000,000 feet, board measure. That much could be cut every year for all time, by taking mature timber only, and leaving the rest to grow. At the present rate of stumpage this would give a gross return of \$15,000,000 yearly.

There are national forests in twenty states, the largest amount of land being in California, second largest in Idaho, and third in Montana. The smallest area is in North Dakota, second in Oklahoma.

The report shows how attempts are frequently made by private parties to obtain valuable timberlands and water power sites by means of fraudulent mining claims, and by other methods. If the land is valuable for mining purposes, or for agricultural purposes, the law makes it easy for an honest claimant to obtain it; but the fraudulent claimant, who attempts to obtain valuable timber by crooked means, finds many difficulties in the way.

It is estimated that the total stand of timber in all the national forests, including those of Alaska, is equivalent to 597,478,000,000 feet, board measure. Approximately 348,000,000,000 is mature and over mature, therefore, ready to cut. Much of this is deteriorating through natural decay, fire, and insect attacks. It is the announced policy to increase sales as rapidly as possible until they reach 3,000,000,000 feet a year. It is the intention to sell in larger amounts than formerly so that strong companies can afford to take hold, build the necessary roads and mills, and get remote tracts of timber out.

During the year 1912 the Forest Service sold 799,416,000 feet of standing timber, of the value of \$1,600,773.55. The purchasers cut during the year 431,492,000 feet, valued at \$942,819.21. Some of these sales were for very small amounts. The total sales were 5,772, and of these 5,179 were for less than \$100 worth of timber. It is thus shown that the most numerous buyers of government timber are settlers in the localities, who need a little for sheds, fences, and other ranch purposes. Only forty-five sales were for more than \$5,000 each. A little figuring will show that

the government is not selling more than one-eighth of the timber that grows yearly. It can increase its sales eight-fold and still take only as much as grows from year to year.

In addition to sales in large and small amounts, large quantities were given away, under a provision of law, for the purpose of helping poor people who need it and cannot afford to buy it, or to help miners develop their property, or stockmen build corrals. The total number of such permits was 38,749, the number of feet 123,233,000, valued at \$196,335.41. In Alaska, where it is difficult in remote regions to procure permits, the people—principally miners—are allowed by law to take small quantities for local use, without permits.

The total area of government forest burned in the year was 469,638 acres, with an estimated destruction of 117,174,000 feet of timber. It is of interest to know that 76,301 trees were struck by lightning in the national forests during the year and many fires were started.

About 30,000 acres were reforested by planting trees during the year. Preparations were made for much greater planting work. One such station collected 11,547 sacks of pine and fir cones.

The Forest Service is conducting investigations in Colorado to determine the effect of forest cover on stream flow. The investigation will need to be continued for a considerable period before definite conclusions can be announced; but already it seems assured that the results will show that the forest has a direct and positive influence in regulating flow in a way to lessen excessive floods and mitigate water scarcity.

Grazing stock in the national forests is an important industry. Formerly, when stockmen fought over the ranges, and the best gun fighter got the best range, the forests were greatly damaged by excessive grazing. That has now ceased. Pasturage is equitably apportioned among the various applicants, and ground is not excessively grazed. The change has greatly benefited the stock industry, and at the same time has improved the condition of the forest pastures. During the year the stock grazed under permit was: Cattle and horses 1,861,678; hogs 57,815; sheep and goats 8,502,816.

The Forest Service employs professional hunters to run down, shoot, trap, kill, and destroy the predatory animals which destroy sheep and other grazing stock. In some localities the attacks of wild animals were so frequent and fierce that sheep could not be kept, and even hogs and cattle were killed. The wild animals consisted of grizzly bears, black bears, wolves, mountain lions, wildcats, lynxes, and coyotes. The hunters have made encouraging inroads upon the marauders, and seem to be gaining the mastery. In 1911 they killed 7,971 predatory animals, and in 1912 the total was 6,082.

Heretofore, all the national forests have been in the West, except small areas in Michigan and Florida; but under the Weeks law, land has been and will be purchased in New England and in the Appalachian mountains south of Pennsylvania for national forests. Much of this land will lie in hardwood regions. The total area acquired under the Weeks law to date is 257,228 acres. It is

believed that the total areas to be acquired in the Southern Appalachians will be about 5,000,000 acres, and 600,000 in the White Mountains of Maine and New Hampshire. The areas will lie upon the sources of rivers.

The report goes fully into the coöperative work which the Forest Service carries on with states to control forest fires. Agreements of that kind have been reached with all the New England states, with New York, New Jersey, Pennsylvania, Maryland, North Carolina, Georgia, Indiana, Michigan, Wisconsin, Minnesota, Mis-

souri, Ohio, Washington, California, Idaho, Colorado, Nevada, Nebraska and Kansas.

Studies of wood structure and strength are carried on at the Forest Products Laboratory at Madison, Wis.; and investigations of the uses of wood by various industries are conducted in co-operation with separate states. Work is also carried on to determine suitable woods and best methods for paper making; and to ascertain whether turpentine methods in the South may be changed for the better.



Selling Lumber Mechanically



Reference was made in an article in *HARDWOOD RECORD* some time ago to the methods used by a manufacturer of a specialty involving the use of poplar. It was pointed out that this concern, by reason of the use of patented machines and other advantages, has a practical monopoly in its field; and that in order to make it difficult to lose its grip, it has taken the trouble to have even its lumber bought by men who do not know what the requirements of the concern are, from the standpoint of actual use, but only know in a purely mechanical way that the grade of lumber needed is thus and so. The opinion was ventured that the cost of the lumber used in that factory is doubtless considerably increased, and the percentage of rejects likewise advanced, because of the practical ignorance of the buyer regarding the factory operations of the concern which employs him.

For the same reason many lumbermen are unable to offer the service which they should be in a position to supply when they enter the office of a consumer of hardwoods. In order to give the customer the lumber that he can work to the best advantage, and in order to give him the advantage of the special information and technical knowledge on the subject that he has acquired, the lumberman necessarily must know a good deal about what is going on back of the office or out in the factory. That he doesn't often get there is a well-known fact; though it would help everybody concerned if he were to be initiated into the mysteries of the manufacturing processes of his customers, in order that he may apply this knowledge to his lumber offerings and get more out of them, for both parties concerned, than when he is merely offering, in a mechanical way, hardwoods of certain grades and thicknesses.

The interesting thing about the situation, too, is that the lumber salesman is almost the only representative of a supply manufacturer who is not called on by the factory man to render this kind of service. If the ambassador of a machinery concern comes along with a new device which is intended to increase production or make some particular operation easier and simpler, he is at once taken in hand by the superintendent and made to disgorge, as it were, the ideas which he has accumulated about that machine. Of course, selling machinery is not a case of merely stating a proposition and getting an order; but it is certainly true that the man who has something new in the equipment line gets a fairer hearing than the lumberman.

"What's your price?" is about the chief question that is shot in his direction; while "Nothing doing," is often as not the greeting that confronts him as soon as he gets past the "Welcome" sign on the door-mat. There is a good deal of competition in the sale of machinery, just as there is in the sale of lumber; but the methods used in disposing of the two commodities probably account for the difference in the reception of those handling them.

The superintendent of a model furniture factory in the Ohio valley said not long ago that he puts his varnish problems up to the salesman who come in to sell him finishing materials; his glue troubles to the representative of the factory putting out that class of goods, and his motor troubles to the electric company supplying him with current or the salesman who got the contract for the installation.

"And when you have trouble with your lumber, I suppose you call on the lumber people for advice?" suggested a visitor, tentatively.

"Hell, no," was the prompt reply. "I have learned that I cannot depend on what they tell me. A lumberman will claim that his oak is nine months old when it is green from the saw; and will mix old stuff with unseasoned without saying a word to me. I'm always afraid they're trying to put something over when they come around, and so I tell them as little about what I'm doing as possible."

Just think of that a moment! The varnish, glue, machinery and power men regarded as helpers, friends, confidential advisers—and the lumberman as a kind of stick-up man who can't quite be turned over to the police! The representative of other lines supplying the woodworker being taken back into the plant and shown what the manufacturer is trying to do; and the lumberman held off at arm's length and permitted to quote on No. 1 common plain white oak, first and seconds poplar or sound wormy chestnut, without ever being given an inkling of what his stuff is going to be used for!

Fine!

Those lumbermen who by sincere and straightforward dealings with a line of consumers have gained their confidence and respect, and are on the proper footing with them in this regard, may think the statement made above rather extreme; but the lumber salesman on the road, the boys who are expected to turn in the bulk of the orders, are perfectly willing to admit that the toughest part of a tough job is finding out what the consumer really wants, which is another way of saying to what uses he is going to put the lumber that is delivered to him.

Sometimes a consumer is doing a lumberman an injustice in grading his stock, simply because he applies the mechanical rules under which it was bought without giving the seller the benefit of the peculiarities of his business. If the latter knew just how the material was to be worked, he could take advantage of the situation to move stock that would be perfectly satisfactory, would help him in cleaning up his yard and possibly would save the consumer money.

An instance of this was found not long ago by a hardwood man who sold a lot of hickory to a farm wagon factory. The inspection of the stock at the factory resulted in a lot of it being thrown out and absolutely turned down because it was pecky. The lumber dealer happened to have some knowledge of the wagon business, and knew enough about the needs of the buyer to feel that the thing could be adjusted. He went to the factory, talked with the general manager, and came out with a check for the rejected lumber, which was taken at a figure only a little below the price originally specified.

The g. m. had written back merely with the report of the inspector in mind; but when the lumberman called his attention to the fact that the strength of a heavy hickory axle is not affected by a few pecks, and that brake-blocks, which are heavy pieces not subjected to any particular strain, might just as well be made of that material as not, the head of the factory had to admit that such was the case. The hardwood man admitted that for the manufacture of spokes and some other pieces used in wagon construction absolutely clear stock is necessary; but he convinced the consumer that in spite of his rigid ruling as to the rejected hickory, it could be used to advantage, especially in view of the concession in price that was offered.

Again, the straight grading rules cover a multitude of points, and on the other hand they place the limits far enough apart to admit

of a number of subdivisions. The lumbermen who are making the biggest successes of their businesses are those who have subdivided and subdivided, not artificially or arbitrarily, but as a result of the study of the needs of the consumer. This means knowing what the factory is going to do to the lumber, of course; and that involves making a detailed study of operations in every consuming line.

A lumberman who happened to have some sap-stained stock that was likely to prove a "sticker" used his knowledge of the furniture trade to compile a list of concerns in his section of the country that were putting out furniture finished in mission and other dark effects. Then he wrote to these concerns, explaining that he had a lot of good lumber which was sap-stained and was otherwise excellent stock; that it would be just the thing for use in furniture which was to be finished dark, and that in order to move it the buyer could get the lumber at a price considerably below the usual figure for stock of that grade. The idea took, and the lumberman moved his offering sap no defect, although the rules would have lowered the grade on it if it had been inspected in the old mechanical style.

In order to make himself serviceable to a consumer who was complaining about the character of lumber he was getting, and fearing that he would have to buy firsts and seconds instead of No. 1 com-

mon, a hardwood man who happened to have the run of that particular factory suggested that the men at the saws be instructed to turn over boards which seemed to be defective, inasmuch as the lumber was thick enough to make it likely that the defect would not show on the other side. This could be done in the case of lumber used in furniture and interior finish, inasmuch as but one side was exposed. The use of this simple expedient resulted in enough clear cuttings being added to enable the manufacturer to continue to buy common lumber instead of having to increase his expense through the purchase of upper grade stock.

Selling lumber mechanically means, first, piling it according to the grading rules and not according to a knowledge of consuming needs; and next, offering it to the user merely according to the grading rules, and not with reference to the way it is to be used. The rules of the hardwood associations are immensely important as a standard by which to settle disputes and from which to evolve other special grades; but the lumberman should not bind himself down to them in such a way that he cannot adapt his stock and his services to the wants of the consumer.

Instead of trying to make the user buy what you have to sell, why not find out what he wants to buy and then give it to him?



A New Mexican Hardwood



During the last few years attention has been called to a new Mexican hardwood, which is used extensively for special purposes under the name of chijole or iron wood. While an article in a recent number of another lumber journal gives a brief account of this important wood, it does not inform the reader from what tree it is derived. Without specimens of the leaves, flowers, fruit or wood it is practically impossible to determine the botanical name of the tree. The common name "chijole" may belong to any one of the hundreds of important trees and shrubs in Mexico. Judging, however, from the gross characters of the wood as stated in the journal referred to, one is led to believe that this wood is derived possibly from some leguminous tree. Dr. Jose Ramirez in his dictionary of common plant names gives chijol, cocuile, colorin de peces, flor de papagallo, jabi, jabin, and mata pez de Mexico as the Mexican names for *Piscidia erythrina* L. (*Ichthyomethia piscipula* (L.) Kuntze.) There are no other plants recorded in this work known by this name, and the two names chijol and chijole) are sufficiently alike to justify the belief that the corresponding botanical name of chijol (not chijole) is *Piscidia erythrina*, an important leguminous tree growing throughout the West Indies, Mexico, and Central America, yielding to commerce a very valuable wood.

This valuable tree grows also in Cuba and Jamaica, where it affords an excellent timber known as Jamaica or white dogwood. It is much employed there for piles for wharves, and other work in damp or wet situations, because of its strong and durable qualities. Another species of this genus is *Piscidia carthaginensis* L., which is also a native of Jamaica. It much resembles the former both in grain and color; the wood is known as black dogwood or bitchwood, and is more esteemed than any other in the West Indies for making naves of wheels.

The true chijol or Jamaica dogwood is a small tree from twenty to fifty feet in height and from two to three feet in diameter at the base. In the West Indies it is found in the plains and in the hills up to 3,500 feet altitude. In Mexico it occurs in nearly similar situations and often in inaccessible locations chiefly along the Gulf coast, where the chijol is said to grow in great profusion. The tree is a native also of Florida, where it grows on the keys and in the limestone soil on the mainland south of Miami.

The wood is very heavy and hard, tough, more or less brittle, close grained, compact, susceptible of a high polish, containing few large scattered open ducts; pith rays very narrow, inconspicuous; color dull yellow brown, the sap-wood lighter. Sargent in his book entitled "Woods of the United States" records the weight of this wood to

be about fifty-five pounds per cubic foot. Chijol becomes exceedingly hard after seasoning and often does considerable damage to tools used in working it. The wood is, therefore, usually cut and worked when green, for it shrinks and warps very little during seasoning. The popularity of this wood is based almost entirely upon its great durability. Authentic records show that the best grades of chijol surpass iron and steel in durability when placed in contact with the soil. It is stated that fence posts of the chijol which were set in the ground in the ancient city of Panuco, Mexico, more than three hundred years ago are as perfect as the day they were cut from the green log. This extraordinary freedom from decay is due to the presence in the wood of a narcotic or poisonous substance within the cavities of the pores or vessels of the wood and the cells of the bark. This poison acts as a preservative, rendering the wood immune against the attack of insects and fungi, which are, as a rule, very destructive to woods in all tropical countries. The bark, leaves, twigs, and roots are particularly astringent and a decoction prepared from them is said to be used extensively for stupefying fish. The Mexicans generally reduce the bark of the roots to a powder by grinding, and place it in a bag or basket. The latter is then dragged up and down the stream until the active principle has been extracted and the fish are stupefied, leaving them free to be captured.

The wood being tough, hard, and durable, is much used for railroad ties, wharf piles, felloes of wheels, cart and carriage work, rollers of native sugar mills, and for other work requiring a tough wood. In Mexico it is used extensively for posts and is unsurpassed as a building material. It finds an important use in boat and dock building, and for all purposes where great durability is required. In addition to its use as timber, great quantities of chijol are made into charcoal, and in some localities it is used extensively for firewood.

It is said the chijol trees along eastern Mexico grow very large and are abundant, but the present crude methods of cutting the timber and bringing the logs to the places of transportation is too expensive to be undertaken with the expectation of profits. Modern methods of logging have not yet been introduced in removing logs or sawed timber. It will be practically impossible to take out this wood except by up-to-date methods on account of the broken character of the regions in which this species is found; a large part of the timber can not be reached even with these means except at an almost prohibitive price. The present methods employed are gravity slides, oxen, and gangs of men, which are antiquated, laborious and expensive. The methods used by the Mexicans are crude, slow, and wasteful at best.

L. L. D.



The Weight of Wood



Lumbermen often discuss the shipping weights of different woods, and surprise is frequently expressed that no official or reliable table of weights exists to guide lumbermen in figuring out how much a thousand feet of lumber of a certain kind will weigh, or what will be the weight of a carload of such lumber, or how many thousand feet will load a car of a given capacity. It is well known how much a given bulk of coal, coke, iron and many other substances weighs, but there is no definite standard showing what a thousand feet of lumber weighs.

There never will be such a table. From the nature of the case it is impossible, except within a certain degree of approximation. If one kind of wood only were considered, as white oak or yellow poplar, it would still be impossible to name a weight which would hold true in all cases. Some shipments would be heavier, some lighter, depending chiefly on the dryness of the wood, but also on several other factors. This can best be made clear by showing on what the weight of a certain wood depends, and what is likely to affect it.

The actual weight of wood—the real wood substance, with all air, water and other foreign matter excluded—is as constant as the weight of iron, lead or any other metal. If we could get down to actual wood, and deal only with that, there would be no disagreements over weights, for so many cubic feet would always weigh so much, never more, never less. But to deal with the matter in that way is impossible in practice. Chemists handle pure wood substance; lumbermen never do, and probably never will.

Ordinary wood, as everybody knows, is made up of cells, tubes, fibers and the like, most of them too small to be seen except with a microscope. The mass may be compared to a wasps' nest, but it is more complex than a wasps' nest. The cells and tubes form an intricate mass, complicated in the extreme. To the naked eye it looks like a solid body, but it is far otherwise. In some woods, as oak and chestnut, some of the pores are large enough to be seen without a glass, but the real cells are very much smaller.

If a piece of wood could be squeezed until all the water, air, etc., were expelled, it would be practically a piece of solid wood substance. What would that weigh per cubic foot? In round numbers, it would weigh one hundred pounds. A cubic foot of it would weigh just the same whether it were white pine or ironwood. That is, all real wood substances are the same and, bulk for bulk, weigh the same. A thousand board feet of real wood (a thing impossible in practice) weighs about 8,333 pounds. No tree of the known world is that heavy, therefore such a thing as pure wood in practice is impossible, or at least unknown at this time.

Yet small pieces of practically pure wood are not hard to obtain, with proper apparatus. Wood cells are nearly pure wood substance after air and water are gotten rid of. They sink in water. They are exceedingly small and are generally invisible, except with a microscope. A hundred thousand of them would not make a cubic inch. They are shaped somewhat like matches, and are laid side by side and end to end to form a mass of wood. They are hollow, and the cavities are filled with water, air, starch, sugar, albumen, tannic acid, and other substances, solid and in solution. The spaces between them are filled in the same way.

Green lumber weighs more than dry because the cavities in the wood contain more water. When seasoning begins, some of the water passes out, and either air takes its place, or the wood shrinks to close the cavities that are emptied of water. The more water gotten rid of, the lighter the lumber.

The reason that no fixed weight can be named for a thousand feet of any particular wood is that the quantity of water remaining in it is more or less uncertain. Other things affect the weight, but water is the most important in practice.

A thousand feet of green lumber may contain 2,000 pounds of water. It is impossible to drive out more than nine-tenths of this water by air-seasoning alone, no matter how long it is left in the piles. In practice, the best air-dried lumber has much more than

ten per cent of its original water in it. It is in the cells, in the cell walls, and in the starch and other substance in the various cavities, and wind and sun cannot compel it to let go and get out. Therefore, in calculating the weight of air-dry lumber, the amount of water remaining in it must be considered but cannot be accurately measured. One lot of lumber is not a sure guide for another, because they may not be equally dry. A thousand feet of one may easily contain three or four hundred pounds more water than another, with no easy way of finding out which is most nearly dry.

No dry-kiln can drive all the water out of wood without heating it sufficiently to destroy the fiber—make charcoal of it. Therefore, there is no such thing in practice as absolutely dry wood. The person who weighs lumber always weighs more or less water with it. Below is a list of several important hardwoods, with figures showing the weights per thousand board feet, if the lumber were absolutely dry—that is, as dry as it could be made without heating it sufficiently to burn it. Of course, that condition is never reached in practice, and hardly ever nearer than ten per cent.

Wood	Absolutely dry weight per 1,000 feet B. M.
Cottonwood	2,020 pounds
Yellow poplar	2,197 pounds
Bass-wood	2,350 pounds
Tupelo	2,697 pounds
Soft maple	2,737 pounds
Sycamore	2,940 pounds
Cherry	3,023 pounds
Red gum	3,070 pounds
Black walnut	3,176 pounds
White or gray elm	3,379 pounds
Red oak	3,396 pounds
White ash	3,397 pounds
Beech	3,574 pounds
Sugar maple	3,590 pounds
Cork or rock elm	3,771 pounds
Locust	3,800 pounds
White oak	3,862 pounds
Sweet birch	3,956 pounds
Persimmon	4,107 pounds
Shagbark hickory	4,347 pounds

No shipper need ever expect to handle lumber of the different species with as low weights as those given, because no dry-kiln turns it out in that state of dryness. The weights above given were calculated from laboratory samples heated to 212 degrees and kept at that temperature until they ceased to lose weight.

The only practical value of the above table is that it enables a shipper of any wood listed to determine approximately how much water he is paying freight on. For example, 20,000 feet of absolutely dry cottonwood weighs 40,400 pounds. If the shipping weight of a car of 20,000 feet is 60,000 pounds, about 20,000 pounds of it is water. A comparison of the shipping weight per thousand feet for any of the woods with the dry weight as shown above, will give approximately the quantity of water still in the lumber. It will often be found ranging from one-fourth to one-third the weight of the lumber.

It should be borne in mind always that figures showing weights of lumber are only averages and approximations. They are as near as can be attained in practice, and are bound to vary more or less.

Though the absolute weights of all woods—the real wood substance with all water and other substances excluded—are believed to be the same (about 1.6 times as heavy as water), there is remarkable difference in the weights of different woods as they are found in practice. Some are three or four times as heavy as others. The six lightest woods of the United States are generally understood to be the following:

	Pounds per cubic foot
Giant cactus of Arizona	19.87
Northern white cedar of Michigan	19.72
Gumbo limbo of Florida	18.71
Big tree of California	18.20
Yucca of California	16.97
Golden fig of Florida	16.30

With these may be contrasted the six heaviest woods:

	Pounds per cubic foot
Stopper of Florida.....	79.02
Vanuelinia of Arizona.....	79.88
Lignum vitae of Florida.....	71.24
Mangrove of Florida.....	72.40
Purple haw of Texas.....	74.78
Black ironwood of Florida.....	81.14

The heaviest and densest of these woods lacks nearly twenty per cent of being solid wood substance. Pores make up at least one-fifth of the bulk. If it were absolutely solid wood substance, a cubic foot would weigh one hundred pounds. The difference between its dry weight and one hundred pounds represents, in a general way, the open cavities in the wood. The heaviest woods, therefore, are from three-fourths to four-fifths real wood, and the rest consists of cavities.

On the other hand, the light woods have comparatively little of actual wood substance in them. Golden fig, the lightest, is less than one-sixth wood and more than five-sixths cavities.

If woods could be compressed into approximate solids—the sides of all their cells and pores squeezed together—their bulks would be

reduced from one-fifth in the case of the heaviest woods to five-sixths in the lightest. If that were done, all would weigh the same, bulk for bulk; at least, it is believed that such would be the case. The process has yet been perfected for compressing wood until all cavities collapse and disappear.

The nearest approach to this is accomplished by heating wood in a retort with the air excluded, so that combustion cannot take place. A temperature of 600 degrees has a striking effect on a block of wood under such circumstances. It cannot burn, but seems to partly melt. It turns brown, contracts in size, and it cuts not unlike hard rubber. When dropped in water, it sinks. It is paradoxical that wood may be made so dry that it sinks in water. However, something besides simple drying takes place when wood is treated to great heat in an airless retort. Such treatment has other than scientific value. It is believed that such wood is valuable for many purposes, and may be substituted, in some cases, for hard rubber, and in others for the hardest, heaviest foreign woods in manufacturing commodities like bowling balls, billiard cues, and scientific apparatus. However, few tests have yet been made in that direction. It is a new field which may or may not develop something practical.



New Woods for Gunstock



Black walnut has long been the favorite gunstock wood in this country. It is easy to work, takes a high polish, makes up richly and often displays a very handsome grain. It stands well the strains from ordinary guns, being resilient and tough. There is a decided sentiment attached to the use of black walnut for this purpose, much the same as the feeling that a high-grade handsaw must have an applewood handle. Manufacturers have accordingly stuck to walnut, in spite of increasing difficulty of securing suitable material. The advent of the high-power automatic has demonstrated that walnut is not strong enough to withstand the continued strain from the whipping action and new woods are rapidly coming into use.

Perhaps the similarity of figure of red gum to Circassian walnut, which has long been the favorite gunstock wood in Europe, lead to its trial. Here, as in most other places where given a chance, red gum has proved its merits. A study of the wood-using industries of Connecticut, where the firearm industry is very important, discloses the fact that out of a little over 600,000 feet, board measure, of wood used for gunstocks in 1910, red gum furnished 210,000 feet and black walnut about 390,000 feet. All other woods used, principally Circassian walnut and boxwood, amounted to less than 4,000 feet.

Red gum has a very decided advantage of being obtainable in desirable quantities and sizes at a low price. The average price paid at the factory for the 210,000 feet of this wood used in Connecticut in 1910 was \$44.50 per thousand feet board measure, while that of black walnut was over \$78 per thousand; Circassian walnut, \$250; boxwood, \$115.50. Only the heartwood of red gum is used, and it is stained and treated to add to the beauty of the wood. The use of red gum, however, is confined as yet to the cheaper grades of firearms, though the excellent service it is giving promises more general employment in this industry.

In the returns from the wood-using industries in Connecticut in 1910 no black or cherry birch was mentioned. Since then, however, the employment of this wood for automatic guns has increased very rapidly. The wood is fairly hard, strong, resilient, fine-textured and capable of receiving a high polish. The rays are finer than maple, but, seen on quarter-sawed material, add materially to the appearance. The natural color of the heartwood is reddish brown, which can be greatly enhanced by staining. The wood is considerably heavier and stronger than black walnut, and is also more difficult to season without checking, which would ruin its value for gunstocks. The best grade of cherry birch costs from \$125 to \$150 per thousand feet board measure.

In making a cherry birch gunstock the wood is sawed into two-inch planks and allowed to season thoroughly for a year or more—the longer, the better. Several years in a dry room are required to secure perfect seasoning, and even then small checks may appear after the stocks are cut out. A special ammonia process requiring three or four days is employed to darken the wood and add to its beauty. A kiln-dried plank of proper length for a stock is ripped through the middle edgewise and the pieces reversed so that the inside faces are outside. These two pieces are again sawed through the middle, but flatwise this time. Then one section on each side is reversed end for end, tending to produce a herring-bone effect, alike on both sides. The parts are carefully matched and glued, roughly sawed to shape, and finally turned down to completed form.

The weakest part of any gunstock is the "small" or grip, and in fashioning a stock it is important to see to it that the wood at that place is not cross-grained or weakened from any cause. This is not always easy to secure, since the handsomest woods for stocks are usually wavy-grained, gnarled or otherwise irregular in arrangement of elements. Built-up stocks are stronger than those of a single piece, as the tendency of one part to split or break is counteracted by the different grain in the one adjacent to it. The wood where the butt-plate is attached should preferably be straight and regular, to prevent splitting. The same is true of the portion where the locks are set in, the direction of grain desired being parallel to the barrel of the gun.

Circassian walnut is usually given an oil finish instead of being varnished, as in the case of black walnut and most other woods. Before oil is applied the wood is subjected to a process of repeated wetting and drying to bring out the grain. It is then sandpapered down smoothly and oil applied and rubbed in thoroughly, time and time again. A very high-priced stock is the result, but the handsome product seems well worth the effort.

Bird's-eye and curly sugar maple are used to some extent for rifle stocks. The wood is very hard, heavy, strong, resilient, and capable of taking a very high polish. Highly figured specimens are very handsome in effect.

Black cherry makes gunstocks of exceptional merit, but the supply of the right kind of material is so limited and the price so high that it does not pay to use it. The rich vinous red of the natural wood can be emphasized by careful finishing, and the appearance of quarter-sawed material rivals or surpasses the richest mahogany.

S. J. R.

The Mail Bag

B 377—Wants White Oak Dimension Strips

ALBANY, N. Y., Dec. 19.—Editor HARDWOOD RECORD: We are in need of a carload of plain white oak dimension strips, mostly $\frac{5}{8}$ "x4 $\frac{1}{2}$ "x6' 8", and are writing you to see if you can put us in touch with any mills that can handle an order of this description. As mills that cut this sort of material are not on our regular buying list, we hardly know where to go.

We shall appreciate very much any information you can give us on this line.

This concern has been given a list of a few manufacturers of the material it seeks.—EDITOR.

B 378—About Weighing Cars

Cape Girardeau, Mo., Dec. 13.—Editor HARDWOOD RECORD: I saw with considerable interest your cartoon in your December 10 issue with reference to the method used in weighing cars. I have had several instances of weight charges on shipments in which I thought that the cars were weighed in about this method and so stated in my claims, and when I made claim for what I thought was the proper weight, they came back with the reply that the Interstate Commerce Commission rules that scale weight takes the preference over estimated weight. Now, I am satisfied this is not a fact unless they can show the shipment has been check weighed, and I have so stated to them, but I have never had a decision on this proposition that I can refer them to, as I have not had an opportunity to look up this matter.

Can you tell me what the Interstate Commerce Commission rules are on this point, or was there any decision made in the recent rate hearing of Boston as referred to in this cartoon? If there was, I would appreciate your giving me this information so that I can embody it in my claim for overcharge in weight, etc.

Thanking you in advance for your attention,

The above inquiry was referred to W. S. Phippen, traffic manager for the National Wholesale Lumber Dealers' Association, who in reply referred the inquirer to the Interstate Commerce Commission's decision rendered on December 5, 1910, in what is known as the Noble case. After this decision was rendered various carriers took advantage of it as a basis for declining claims for overcharges in weight with the result that complaints were received from many sources. A number of these complaints having reached the Interstate Commerce Commission in March, 1912, a special investigation was instituted by the commission into the methods and practices employed by the carriers in arriving at the weights of interstate shipments. The first general hearing was held in Chicago last March, since which time several hearings have been held in different parts of the country, the last one having been held at Atlanta, Ga., December 18.

At this meeting the public was permitted to introduce any evidence pertaining to the subject, and railroad representatives were examined as to the construction of scales, methods of weighing, etc. The hearing which was held in Boston, and which was referred to in the December 10 issue of HARDWOOD RECORD, constituted a part of this general investigation. The evidence is now all in and the case stands submitted to the Interstate Commerce Commission for such action as that body may see fit to take.

In the opinion of Mr. Phippen it is quite probable that the commission will recommend a number of changes with a view to bringing about a more accurate system of weighing. Mr. Phippen says that he has no record of any decision having been made by the Interstate Commerce Commission which would confirm the argument of the inquirer that shipments must be check-weighed. It is possible that the commission may issue such a recommendation as a result of these investigations. It may be some little time before a decision is handed down by the commission, as there have been volumes of evidence taken at the different hearings.—EDITOR.

B 379—Seeks Hardwood Connection

Boston, Mass., Jan. 4.—Editor HARDWOOD RECORD: We control a business in hardwoods in the New England territory of approximately fourteen million feet annually, which we have handled for a good many years. On this business our gross loss in twenty years has been less than two thousand dollars. Right now we are seeking new connections based either on direct purchases or commission basis for oak, chestnut, ash and a full line of northern woods. Can you suggest the names and

addresses of any concerns who you think would be interested in putting their output through our hands?

The above letter is from one of the cleanest-cut and most competent hardwood operators of the East, and he is one that can be heartily commended to the confidence of any northern or southern manufacturer who would be interested in developing increased New England trade. The New England hardwood trade is one which very few manufacturers can afford to handle direct, as it is infinitely cheaper and much more satisfactory to handle this business through a competent local representative who knows all the ins and outs of the New England consuming demand.

The address of the writer of the above letter will be supplied to any competent manufacturer in confidence on application.—Editor.

B 380—Seeks Ash, Elm and Maple Dimension

Buffalo, N. Y., Dec. 31.—Editor HARDWOOD RECORD: We will be glad to receive from you a list of dealers in dimension stock who could furnish us ash, rock elm or rock maple sticks 2 $\frac{5}{8}$ "x21 $\frac{1}{2}$ "-30", and some rock elm or rock maple 3 $\frac{1}{2}$ "x3"-34" for delivery at our Indiana factory.

The above letter is from an important manufacturing house which has been given a list of a few possible sources of supply for this material.—Editor.

B 381—Seeks Five-Eighths No. 2 Gum

LANCASTER, O., Jan. 1.—Editor HARDWOOD RECORD: We are in the market for $\frac{5}{8}$ " No. 2 common red gum. If you know of anyone who can furnish this material, kindly advise us.

The writer of the above letter has been given the names and addresses of several manufacturers of thin gum.—Editor.

B 382—Seeks Wagon Stock

Burlington, Iowa, Dec. 24.—Editor HARDWOOD RECORD: Will you kindly furnish us with the names and addresses of concerns who can furnish wagon stock material as per enclosed list? This stock is to be in the rough, but the list shows finished sizes.

COMPANY.

The foregoing letter is from a leading wheel manufacturing company and is accompanied by a list of hickory axles, oak or hickory bunk bolsters, finished bolsters, sand boards, and oak and hickory sizes covering neckyokes, reaches and all the other parts of wagons and buggies. The writer has been supplied with the names of a few manufacturers of this material.—Editor.

News Miscellany

Memphis Lumbermen in Semi-Monthly Meeting

The first semi-monthly meeting for 1913 of the Lumbermen's Club of Memphis was held at the Hotel Gayoso Jan. 4. The feature thereof was the retirement of the old and the installation of the newly elected officers. Fifty-five members and visitors were present and the usual luncheon was served. A round of cocktails was also enjoyed by those present through the courtesy and thoughtfulness of the new president, John M. Pritchard. In drinking these cocktails toasts were presented embodying the success of the new administration and the welfare of the Lumbermen's Club of Memphis.

F. B. Robertson, the retiring president, delivered his address to the members before surrendering his office to his successor. He assured the club that he had highly appreciated the honor conferred on him in elevating him to the highest office in the gift of the club, that he had found a great deal of pleasure in administering its affairs and that he had himself been very much benefited through the service he had rendered. He briefly reviewed the accomplishments of his administration, referring with particular emphasis to the efficient work of the river and rail committee which had resulted in the formation of the Lumbermen's Traffic Bureau, to the affiliation arrangement with the Business Men's Club brought about through the splendid work of the special committee appointed for that purpose, and to the excellent work done by the executive board and the other standing committees of the organization, all of whom he thanked warmly for their hearty co-operation and support. He predicted that the traffic bureau, owing to the importance of the proper handling of rate and traffic matters, would easily become one of the most important organizations of its kind anywhere in the country and he bespoke for it the support of every lumberman identified therewith. His report on membership changes follows: Admitted during the year, five active and one associate; lost through resignation, six active; dropped, two active; lost by death, two active; transferred from active to honorary, one. The membership now stands: Active 152 against 153

a year ago, associate 3 against 5, honorary 3 against 2, making 161 against 165 at the beginning of 1912.

In reference to the finances of the club, President Robertson said that these were not what they should be. He recommended that the dues of active members be increased and that the banquets be given only with the money paid by the members therefor, or dispensed with altogether. He referred to the fact that the past year had been a prosperous one and that the members of the club had had the good fortune to share in this prosperity. He thought that every advantage should be taken of the present excellent conditions to secure the highest possible prices for the lumber sold during the year. He again thanked all the committees for their co-operation and said that in closing he had one more recommendation, that of the gentleman constituting the new administration.

Secretary R. T. Cooper then submitted his annual report. This showed that the income from all sources, including the balance left by the previous administration, had been \$2,558.31 and that expenditures had been \$2,847.80. The club tendered a vote of thanks to Mr. Cooper for the efficient manner in which he had performed his duties during the year.

Mr. Pritchard, on assuming the chair, again pledged his best efforts in behalf of the club and asked for the support of every member. He then proceeded to name the standing committees for the year as follows:

F. B. Robertson, chairman Advisory Board, composed of all the former presidents of the club.

ENTERTAINMENT

F. E. Stonebraker, chairman, J. W. Dickson, S. C. Major, Chas. Dudley, C. C. Latanner.

INFORMATION

J. S. Bailey, chairman, F. W. Dugan, Jas. M. Thompson, R. Sondheimer, U. S. Lambert.

FUND-RAISING

Mark H. Brown, chairman, W. L. Crenshaw, A. N. Thompson, C. T. Ransom, C. M. Kellogg.

RESOLUTIONS

W. H. Greble, chairman, Geo. W. Fooshe, W. R. Barksdale, F. E. Gary, W. S. Darnell.

LAW AND INSURANCE

James E. Stark, chairman, S. B. Anderson, S. M. Nickey, R. J. Wiggs, Frank May.

RIVER AND RAIL

J. W. McClure, chairman, C. D. Hendrickson, Geo. C. Ehemann, W. B. Morgan, O. M. Krebs.

MEMBERSHIP

F. T. Dooley, chairman, R. J. Lockwood, W. A. Stark, B. C. Tully, Harry Stimson.

STATISTICS

D. F. Hauer, chairman, Geo. O. Friedel, J. R. McFadden, Keith Blanton, G. E. Bailey.

There were five applications for membership presented at this meeting, as follows: Active—Palmer Kellogg, Christianson Lumber Company, Chicago; Joe Thompson of the Dudley Lumber Company, and R. E. Dickinson of the Anchor Sawmill Company; associate—R. L. Jordan and John Penrod, both of the Penrod Walnut Corporation, Kansas City, Mo. These will be voted on at the next meeting and will make the total membership 166 against 165 at the beginning of 1912.

The resolutions committee was authorized to draw up and forward to the proper authorities resolutions endorsing the National Reclamation Association in its efforts to secure enactment by the federal congress of the Newlands-Bartholdt bill looking to river regulation and flood prevention. This bill seeks an appropriation of \$50,000,000 a year for ten years for the building and maintenance of levees throughout the Mississippi valley and for such other work as may be necessary to prevent a recurrence of the tremendous damage that has followed the floods in the Mississippi and its tributaries during the past few years. The club also directed that the Business Men's Club be asked to take immediate action on the same subject and that other business bodies be requested to appeal to their representatives in congress to lend this matter their strongest possible support, owing to the vast importance of river regulation and flood prevention to the lumber and other interests throughout the Mississippi valley.

A New Thing in Veneer Presses

If the panel manufacturer who doesn't know should be told that he can make one pressing of built-up stock and release his press in forty-five seconds, he would say that the narrator was dreaming. That this can be accomplished, however, has not only been stated but demonstrated by a Chicago firm, the Charles F. Elmes Engineering Works, which concern is marketing a remarkable veneer press that is so arranged and equipped that it can be handled with the facility of an electric runabout.

The press is built on the inverted type, the pressure being supplied by hydraulic force created by means of the Elmes' unsurpassed hydraulic pump. It might be well to insert here that this company was established a half century ago by Charles F. Elmes and is being perpetuated by his sons along the same lines that it was carried on by the father. Absolute perfection in every detail of design and construction was the watch-word of the elder Elmes, and this policy is being followed to the last detail by the firm as it is run today.

The press is built for electric or shaft drive and requires but a fraction of the power necessary to run the ordinary press. The feature of the inverted press is the fact that slipping of the veneers is absolutely eliminated. The bundle is the stationary factor and the power is applied from above by means of the plunger ram, thus the bundle will be firmly held in its exact position.

Another feature is the newly designed containers, which can be adjusted as the power is being applied, thus eliminating a considerable waste of time necessitated by the older methods. Extra heavy design and smooth finish are characteristic of the entire machine. The plunger ram and cylinder are made of semi-steel and the pump frame, base and plunger guide are cast in one piece, making the pump practically indestructible. It is designed with two high pressure plungers, no low pressure plungers being required, as the cylinder is filled automatically.

The crank shaft and eccentrics are made in one piece, extra heavy, and the eccentric straps are babitted and bored. Bronze and hardened tool steel are used in all parts where the employment of these metals will make construction more lasting. The retainer rods have exceptionally quick releases. They can be tightened or released without the use of a wrench or without breakage.

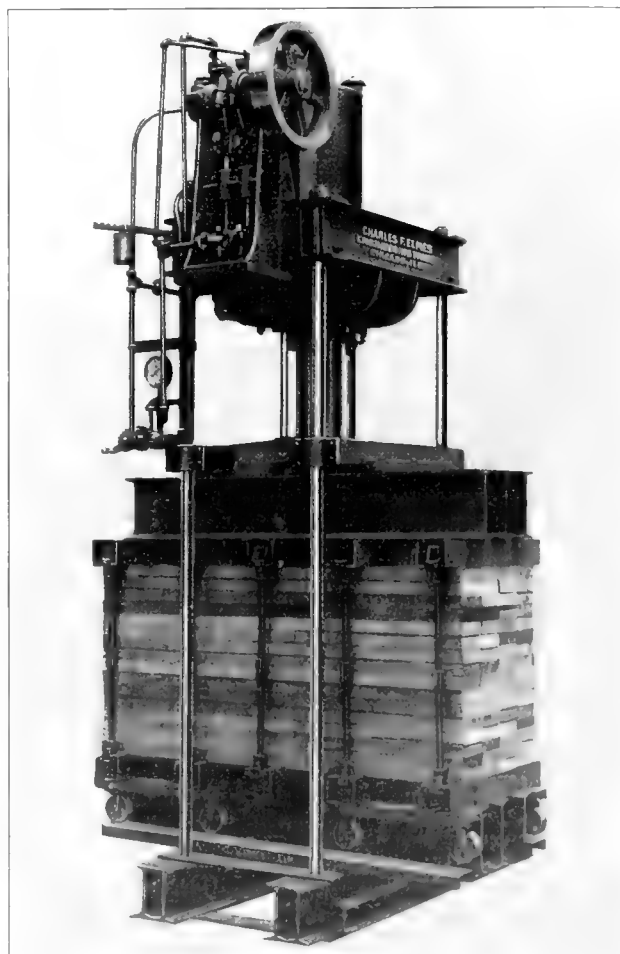
It has been demonstrated that one press can easily handle one hundred bundles a day. This fact, together with the assured high class work turned out by this machine, should well demonstrate its utility in the manufacture of panels.

News of the Manufacturers' Association

The coming convention of the Hardwood Manufacturers' Association of the United States bids well to be the biggest gathering of lumber manufacturers gotten together for several years. Thus far at the offices of the association more requests have been received for accommodations at the hotels from the millmen than ever before. An extra force of clerks is necessary to take care of the additional work in making the necessary preparations, and while the program is not as yet completed, it is given out by President W. E. De Laney and Secretary Doster that every detail looking to the comfort and entertainment of the visiting delegates is to be well looked after. Work on the general program is nearing completion and it will soon be mailed to the lumbermen interested all over the country.

American Hubs in Africa

Wagon makers in Rhodesia, South Africa, at elevations of 5,000 feet above the sea buy American elm for wagon hubs. Native wood which answers in some other parts of South Africa fails to give satisfactory service in the dry climate of Rhodesia because of excessive shrinkage and checking; but elm from the United States meets the requirements. The only other wood which has been found serviceable for hubs in that climate is Australian blackbutt.



NEW INVERTED HYDRAULIC VENEER PRESS

Changes in the C. L. Willey Enterprises

Edis Anderson, who has been secretary and treasurer of The Hardwood Company, publisher of *HARDWOOD RECORD*, during the past year, and who also has been manager of E. H. DeFebaugh's trade publications, *The Barrel & Box*, *Rock Products* and *American Stone Trade*, has resigned both positions, and has engaged with C. L. Willey of Chicago to take the management of his double band sawmill and veneer plant at Memphis, Tenn. This big plant has been closed down for the past twelve months but now will again be put into commission.

Mr. Anderson has added to his previous business reputation in his work with the trade publications noted during the past year, and makes this change simply to increase his opportunities in a commercial way. Mr. Anderson has had long experience in connection with lumber and veneer enterprises, and undoubtedly will make a success in his new position. The details are not entirely complete, but it is rumored that Mr. Willey has recently purchased a large hardwood timber tract in Arkansas, which together with sundry log purchases, will supply a stock for the Memphis sawmill and veneer plant for years to come.

The employment of Mr. Anderson to take charge of the Memphis enterprise gives Mr. Willey an opportunity to devote his entire energies to his large and very important mahogany and other fancy wood veneer and lumber plant at Chicago. This latter business is developing very fast and is of such monumental size that Mr. Willey feels as though his energies should be entirely absorbed in his work at Chicago and abroad in connection with it, even considering the fact that he is most ably assisted by Manager Clarence E. Ingalls and his son, Charles B. Willey.

At the Chicago plant Mr. Willey is now installing a Kraetzer Preparator, through which he will handle his mahogany and other fancy wood output, and soon will erect another single band mill to supplement his present equipment for the cutting of veneer flitches and lumber.

Death of James H. Barr

James H. Barr, Cincinnati, died at his home in that city on Dec. 21. Mr. Barr was a lumberman. He was born about sixty years ago in the suburb of Ludlow, Ky., and commenced the work of life as a boy with his father in the retail lumber business in the yard on Sixth street, Cincinnati, now owned by B. A. Kipp. He succeeded to this business at his father's death, which he conducted for some years. Later he went into the commission lumber business, handling building woods, in which line of work he had been engaged up to the time of his death.

Mr. Barr occupied an attractive home at Mount Lookout, on the hill-tops overlooking Cincinnati. He leaves to mourn his loss not only his wife, and a son and daughter, who have about attained their majority, but a host of friends both in and out of the lumber business. Mr. Barr's leave-taking was sudden and unexpected. He was indisposed for a few days before his death, but was supposedly so far recovered that on the morning of his demise he was out of bed and dressed, and made several business appointments by telephone previous to his intended departure for down town. He died in a chair at his bedside from heart failure.

The foregoing statements are commonplace and perfunctory, and are made to preface the statement that during his entire lifetime Mr. Barr enjoyed not only the respect, but the friendship of everyone with whom he ever came in contact in a business or social way. He was a just man; he was an honest man; he was a kindly man; he was a lovable man. "Jim" Barr never had business of his own of so much importance that he would not interrupt it to do a favor for any of his numerous friends. He spent his life in doing kindly acts, and in his passing he does not leave a big estate, but he has enriched the community in which he passed his life. He has enriched it with his self-sacrifice, with his kindness and with his wonderful humanity. The world is much poorer in the passing of James H. Barr.

The Chestnut Tree Blight

The Pennsylvania Chestnut Tree Blight Commission has issued from its Philadelphia office bulletin No. 1, in which it defines the disease which is affecting chestnut trees, gives estimates of loss, explains how the disease works, and gives advice as to how it may be combatted. It is admitted that the entire commercial supply of chestnut in this country is in danger unless successful methods of combatting the disease are found. The loss thus far is not less than \$25,000,000.

The disease is caused by fungus, not by insects as some suppose. This fungus is a parasitic plant which resembles in many ways the moulds that form on decaying food. It grows, however, in the interior of the bark and not on its surface, and feeds on living tissues instead of wholly on dead material, as do the moulds mentioned. It may be described as consisting of great numbers of tiny threads, which branch and grow in every direction through the bark. These threads, collectively known as the mycelium, are so small that a single one can be plainly seen only through a microscope; but they are so numerous in the diseased bark that as mycelium, they may be seen with the naked eye, clustered together in the form of small, buff-colored, fan-like bodies when the bark is pared down. These fungal threads feed in the living tissues of the bark and eventually grow into the sapwood. Wherever they grow they cause the speedy death of the living cells of the trees. After a time the fungus completely girdles the tree, trunk or branch on which it is feeding. This causes the death of that part above the girdled portion, much as if girdled with an axe.

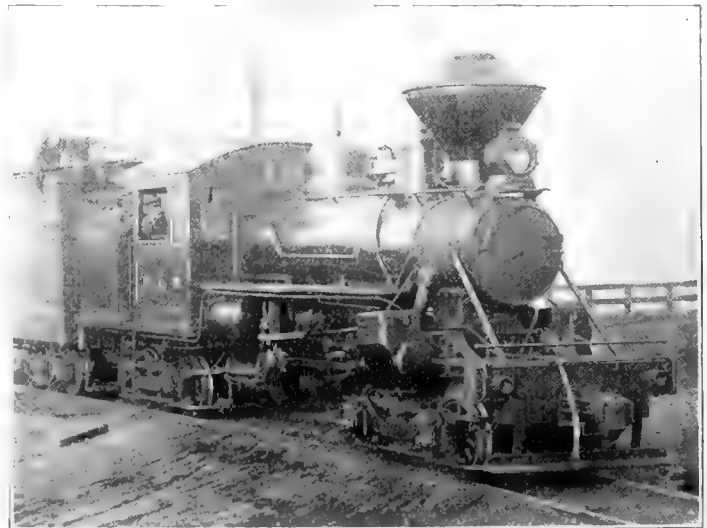
When the fungus has grown for a time in the chestnut bark, it develops on the surface of the latter a series of tiny, irregularly dome-shaped protuberances (called pustules), each rarely larger than the head of a pin. These are the fruiting bodies which produce millions of sticky spores corresponding to seeds, and so tiny that they can be seen only by means of a powerful microscope.

The spores are believed to be carried from tree to tree on the feet of birds, or on the bodies of insects. Strong suspicion rests on woodpeckers and ants. The wind doubtless often carries the spores, and probably long distances.

It is known that periods of dying out of chestnut trees have occurred in the South, in past years, but the cause has not been traced to this disease. Some were as early as 1824. Chestnut trees were once common in central Georgia, but have practically disappeared.

New Geared Logging Locomotive

New devices to facilitate logging operations are always looked upon with interest by lumbermen owning their own timber, and others who carry on logging on an extensive enough scale to employ locomotives for log hauling. A new type of geared logging locomotive has just been turned out by the Baldwin Locomotive Works at Philadelphia, which has been built with a full understanding of conditions to be met. The locomotive is symmetrical in design, and power is transmitted to the axles through a central drive. The pistons are directly connected to a transverse shaft, which is geared through bevel wheels, to two longitudinal shafts. These transmit power to the front and rear trucks respectively. Each truck is provided with its own driving shaft which is spur-gearred to the corresponding longitudinal shaft. The housings for the truck



NEW GEARED LOCOMOTIVE MADE BY THE BALDWIN LOCOMOTIVE WORKS, PHILADELPHIA, PA.

gears are of cast steel. The trucks are of the equalized pedestal type, so arranged that the boxes can have vertical play in the pedestals without throwing the gears out of mesh.

Combined slip and universal joints are placed in the longitudinal shafts to compensate for the changing positions of the trucks when the engine is traversing curves.

The boiler is of the usual locomotive type with a deep firebox, which can be arranged for burning either coal, wood or oil. The supply of fuel and water is carried back of the cab. Other features are cylinders supported on the frames, no part of the driving gear is supported by the boiler, which is free to expand at the firebox end, and is subjected only to such strains as any boiler must carry.

The construction of the trucks results in easy riding and minimum strain on the tracks.

Inasmuch as the Baldwin company has constructed over 38,000 direct-connected locomotives for all classes of service, it has had ample experience in which to work out an effective design of geared locomotive.

Death of J. B. Simmons

Jason B. Simmons of Farmington, Del., one of the best-known residents of that state, died Dec. 19, at the age of seventy-six years. Mr. Simmons carried on a lumber business for many years, making a specialty of white oak car and ship lumber, and furnishing large quantities of this material to the Pennsylvania Railroad Company. Among his customers who were also extensive buyers of this wood, were the Harlan & Hollingsworth Company and the Jackson & Sharp Company, both large shipbuilding concerns. Mr. Simmons was postmaster of his town at the time of his death.

Motor Driven Circular Saw

The accompanying illustration shows a remarkably serviceable combination of woodworking machine made by the Parks Ball Bearing Machine Company of Cincinnati, Ohio. This machine is driven by a 3-horsepower, 60-cycle, 220-volt alternating-current Westinghouse induction motor.

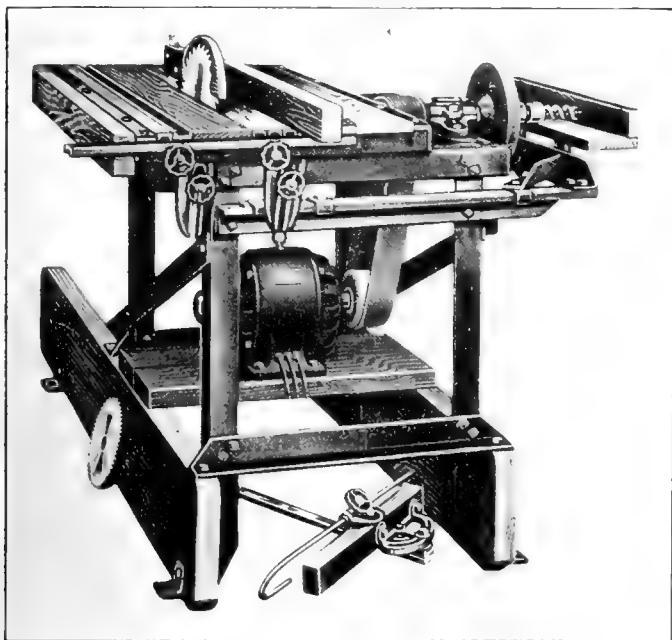
This machine may be used as a circular saw, and also as a boring machine by means of an attachment. It is made in two sizes, light and heavy, the former suitable for driving a 3-inch belt, and the latter for a 4-inch belt, the belt in each case running over a 3-inch pulley and a saw 14 inches in diameter on ripping hard lumber.

The frame is made of heavy angle steel, strongly braced, with overlapping corners securely bolted together. A long substantial wooden base, one on each side, greatly increases the steadiness of the machine, giving more foundation and distributing the strain over more floor space. Angle steel clips are provided on the timbers for the machine to the floor.

The saw table is made of angle and channel steel ground to a uniformly level and true surface. The angle steel side table affords a substantial support, on which to bolt wood extensions of any width or length for work. The table is hinged at the back end so as to permit its being lowered or raised. It is provided with an adjustable depth cut having an opening for a 14-inch saw that will cut 5 inches deep.

The hard wood strip side of the saw is removable so that a 3¾-inch cutter-head can be used on a saw mandrel. The table is of sufficient width to permit the addition of a 3 or 6-inch pointer.

The machine, as above stated, can also be supplied with a boring attachment which can be used for routing, mortising and turning rosettes.



A WESTINGHOUSE MOTOR IN SERVICE

This consists of an adjustable sliding support to hold the material being bored and a check attached to the end of the saw mandrel. Holes are provided in the frame for this attachment which can be easily added after the saw has been installed.

The machines are designed for electric drive by motors of from 3 to 4 horsepower capacity. The motor is mounted on the floor and belted to the pulley on the shaft which is mounted on the base timbers.

The motor shown in the illustration herewith, as previously stated is of the alternating-current type with what is known as a squirrel cage rotor or revolving part. This type is particularly adapted to use in woodworking plants because of the absence of any moving contacts and the entire elimination of any danger of fire from sparking.

The motor requires absolutely no attendance, beyond an occasional oiling, and may be started or stopped from any point that is convenient to the operator.

Meeting of the Cincinnati Lumbermen's Club

The regular monthly meeting of the Lumbermen's Club was held at the Business Men's Club, Jan. 7, 1913. The usual course dinner was served promptly at 6:30 p. m., following which President Shiels called the meeting to order. After the reading of the minutes the business of the evening was taken up in regular order.

B. F. Dulweber, reporting for the committee appointed to assist in the prevention of increases in freight rates on lumber from southern points, stated that Traffic Manager G. M. Freer of that branch of the Chamber of Commerce, after protesting against the increases, had secured the suspension of the advances being put into effect. Mr. Dulweber advocated the gathering of statistics that would in his opinion have considerable

weight in preventing the rates from being advanced when the time for a hearing comes. Mr. Freer reported that he had made the trip to St. Louis, Mo., to the National Lumber Manufacturers' Association, and had been present at the Interstate Commerce Commission hearing at that place early in December on the question of increased rates to Canadian points after the 1st of January. He stated that the hearing was postponed until the 24th of January at Cincinnati, at which time the shippers will be heard.

The matter of taking some part in the convention of the Hardwood Manufacturers' Association, to be held here early in February, was taken up, and the entertainment committee, consisting of J. A. Bodser, chairman; Emil Thoman, W. E. De Laney, Harry R. Brown and Charles McCall, was authorized to prepare a list of names to be invited to the convention at the Sinton hotel, and to be on hand during the convention to take care of the visitors and to have plenty of cigars and other things on hand at all times.

After the lively meeting had adjourned, the usual bowling party was formed by some of the enthusiastic bowlers, and the balance of the evening was enjoyed at this sport at a nearby bowling alley.

A Handsome Calendar

The R. E. Wood Lumber Company of Baltimore, Md. which in addition to its own poplar, oak, chestnut and other hardwood products, handles also the output of the mills of the Montvale Lumber Company of Pontana, N. C., is sending its friends as usual a handsome calendar. This year the calendar is an enlarged photograph, sixteen by twenty inches in size, enclosed in a handsome mat, of one of the splendid poplar trees that grow on the company's timber holdings at its Keno, W. Va., plant. This enlargement was executed from a photograph made by the editor of *HARDWOOD RECORD*, and is of a six-foot poplar tree, with a hole nearly eighty feet to the first limb. Beside the tree is pictured Clarence Wood, a brother of R. E. Wood, standing beside his saddle horse. The accompanying figures reflect the immense size and character of the R. E. Wood Lumber Company's poplar timber growing in McDowell county, and no better poplar grows anywhere. The picture is fully worthy of a handsome frame, and doubtless will decorate many lumber offices throughout the land.

J. E. Rhodes Assumes New Duties

On Jan. 1, J. E. Rhodes, the new secretary-manager of the National Lumber Manufacturers' Association, assumed his duties in connection with that office. Mr. Rhodes is located in the Stock Exchange building at Chicago. For several weeks prior to taking up his headquarters in this city Mr. Rhodes traveled, visiting the headquarters of the various affiliated associations making up the National association. He is planning to devote the next five or six months to a general tour, getting into what he terms "the high-grass sections" of the country, where he will get in direct touch with representative individual operators and endeavor to prove to them that the National association is not an association that is beyond their reach, but one which is of direct practical benefit to every lumberman in the country. The aim of the association under its new administration will be to submerge the National association to the interests of the allied associations. The opposite has been the policy heretofore.

In speaking of his trip to the various associations, Mr. Rhodes stated that he encountered everywhere a decided spirit of optimism. The South, according to the secretary, is in a distinct state of financial, industrial and commercial boom. Prosperity is conspicuous everywhere.

Secretary Rhodes' opinion of the effect of the Panama Canal upon lumber shipments and markets is that the question will adjust itself with changing conditions, but that he anticipates shipment of considerable Pacific coast stuff to compete with southern pine. While there is a logical market for the Pacific coast timbers, inasmuch as such stock in the pine forests of the South is becoming comparatively scarce, still, according to Mr. Rhodes, such shipments will involve the shipment in connection with them of a considerable amount of smaller stock to fill out the cargo. Because of the fact that this stock is shipped as a side line which can be marketed at comparatively low prices, the effect of such shipments will probably be felt by southern pine manufacturers. Mr. Rhodes is also of the opinion that the opening of the canal will effect a material increase in the market for hardwoods in the Pacific coast states, as it will result undoubtedly in greatly reducing the cost of such shipments.

Sawmilling in Germany

A recent consular report from the region of Thuringia states that sawmilling and woodworking in that territory are important inasmuch as it is one of the most thickly forested regions of Germany. The streams there are too small for commercial navigation or logging, but are of sufficient size to furnish water power for the numerous sawmills on their banks. Large quantities of lumber in fir, pine, beech, birch and spruce, given in the order of their importance, are cut each season, but the work of logging is carried on scientifically with due regard for the principle of conservation.

The same report tells of two important piano factories in that district. These plants besides using a great deal of American walnut and mahogany for German piano cases, import many fancy cases and piano parts from the United States. Of the latter the most extensively imported in that section is Pianola self-playing apparatus.

Two of the important factories in that section supply high grade grades in black wood, oak, mahogany, rosewood, cherry and walnut. In the cheap pianos domestic hardwoods are used to produce imitations of the more costly woods. In the medium priced pianos the imported hardwoods are veneered on domestic hardwoods.

Progress of Grand Rapids Firm

The success which the Grand Rapids Veneer Works, Grand Rapids, Mich., is meeting in installing its dry-kiln is best shown in the large number of new orders it is constantly getting. Among the recently closed orders for dry-kilns which will be installed by this company are:

The Hamilton Organ Company, Chicago Heights, Ill.; Meadow River Lumber Company, Rainelle, W. Va.; Northwestern Cooperage & Lumber Company, Gladstone, Mich.; Wood-Brooks Company, Buffalo, N. Y.; Pilliod Lumber Company, Swanson, Ohio; Dickson Planing Mill Company, Dickson, Tenn.; Keystone Furniture Company, Williamsport, Pa.; Baker White Pine Lumber Company, Baker, Ore.; Conrades Chair Co., St. Louis, Mo.; Wilson Saw & Manufacturing Company, Chicago, Ill.; Hartmann-Sanders Company, Chicago, Ill.; Imperial Wheel Company, Flint, Mich.; Griswold Motor & Body Company, Detroit, Mich.; Canada Lumber Company, Ltd., Toronto, Ont.; St. Louis Basket & Box Company, St. Louis, Mo.; Butterfield Lumber Company, Norfield, Miss., and the Staib-Abendschein Company, New York, N. Y.

Biltmore "Doings" for November

The monthly report from the Biltmore Forest School issued for November, 1912, from its winter quarters at Darmstadt, Germany, shows that the school is well established in the Fatherland for the winter months. The students have had their usual splendid opportunities for studying intensive methods of forestry as practiced abroad, and the report suggests various features which have been of unusual interest to the students.

The interesting observation is made that cutting and bucking of pine in stands, averaging fifteen thousand feet board measure to the acre, is more expensive in Germany with cheap wages than it is in the United States with wages three times as high. Regarding the same type of growth, the report observes that this class of timber averaging twelve inches is sold at a net return of four hundred dollars per acre.

The students made a trip to the Spessart mountains in Bavaria, where they examined the famous Spessart oaks. It is astonishing to note that while some of these white oak logs are worth as high as three hundred and fifty dollars per thousand feet board measure in the woods, the forest officials are considering the advisability of planting spruce and pine in their place. The students were given their usual opportunities of observation covering the many different phases and degrees of development of forestry, lumbering and woodworking industries in the European country.

Board of Governors of National Manufacturers' Association Meet

At the call of President E. G. Griggs, the board of governors of the National Lumber Manufacturers' Association met at the Auditorium Annex in Chicago on Jan. 8. Those in attendance were President Griggs of Tacoma; William Irvine, Chippewa Falls, Wis.; Edward Hines, Chicago; J. B. White, Kansas City; W. C. Landon, Wausau; F. E. Waymer, Jacksonville; C. A. Bigelow, Bay City.

The resignations of Secretary George K. Smith and Manager Leonard Bronson were formally accepted and J. E. Rhodes was elected secretary to assume the work of both offices.

The most important action of the governors was the decision to accept the request of the ways and means committee of the House of Representatives to present to it at Washington on Jan. 13 the views of the lumbermen regarding the tariff on lumber.

The matter of the national advertising campaign was fully discussed and on account of the amount of money required to continue the same it was decided to postpone action until such time as the money can be readily obtained.

The next regular meeting of the National Lumber Manufacturers' Association will be held at Kansas City, Mo., at a date to be announced later by the officers.

As the governors of the National Lumber Manufacturers' Association constitute the board of directors of the National Lumber Manufacturers' Credit Corporation, the meeting of the latter board was held and Mr. Rhodes was elected secretary of the credit corporation also. The report of Superintendent W. F. Biederman, covering the details of the work, was presented, showing the credit corporation to be in a very satisfactory condition.

It was decided that inasmuch as moving the offices of the Blue Book to Chicago in conjunction with the general offices of the association would disrupt the organization of the Blue Book, the present offices in St. Louis shall be continued.

In connection with the presentation of the lumbermen's interest to the ways and means committee, Secretary Rhodes was requested to personally represent the association at Washington and to prepare a brief without special instruction from the association covering the views of the lumbermen regarding lumber tariff legislation. The sentiment of the governors was that a dignified, conservative statement be presented which will contend that the present duty on lumber is a duty for revenue only and that it is not desired in any way to protect the lumber industry of the United States. This contention seems particularly true in

view of the increasing prices of lumber in this country. The two arguments which the brief will most strongly advance in favor of the continuance of the present lumber tariffs are the relation of such tariffs to conservation and the disadvantages effected, in the cases particularly of west coast and southern pine lumber, by the iniquitous marine laws. Regarding the relation of the tariff to conservation, it has been amply demonstrated by statistics and actual practice that lowering materially or eliminating duty on such lumber as could be imported from Canada, for instance, would result in a great influx of low-grade Canadian lumber for which stock Canadian mills have practically no market in their own country. This would mean that instead of the Canadian mills burning their low-grade stock and the American mills using theirs for box lumber and similar purposes, the conditions would be exactly reversed. This contention seems to be not merely a theory, but has actually been shown when prices in this country have been high enough to permit of the importation of Canadian low-grade stock.

The injustice of the present marine laws governing coast-wise trade results from the provision which necessitates the shipment of such commodities in coast-wise trade in American ships manned only by American seamen and of American register. This means that coast-wise shipments between American ports are one or more dollars higher than shipments from Canadian or other ports to American ports. The present duty, it is claimed, just about offsets this disadvantage and its elimination would mean a serious hardship to certain classes of American shippers of lumber.

Building Operations for December and 1912

Official reports from some fifty cities regularly reported in The American Contractor, Chicago, show an aggregate increase of 26 per cent during the month of December as compared with December, 1911. The year 1912 shows an increase of 6 per cent as compared with 1911. The latter year was considered quite satisfactory by the building fraternity and the increase noted is accepted with pleasure. Cities which scored a gain of over 50 per cent for December, 1912, are: Atlanta, 183 per cent; Birmingham, 68; Boston, 65; Ft. Wayne, 298; Harrisburg, 213; Kansas City, 100; Los Angeles, 58; Minneapolis, 640; Nashville, 343; Greater New York, 64; St. Joseph, 266; St. Louis, 153; Shreveport, 229; Toledo, 63. The greatest gain for the year was Manchester, 82, and Atlanta, 60 per cent. Particulars will be found in the following tables:

December			The Year		
	1912	Per cent	1912	Per cent	
	Cost	Gain/Loss		Gain/Loss	
Akron	\$ 254,085	44 ..	Akron	\$ 4,799,927	33 ..
Atlanta	918,490	183 ..	Atlanta	9,987,444	60 ..
Baltimore	541,805	22 ..	Baltimore	8,049,575	13 ..
Birmingham	172,194	68 ..	Birmingham	3,813,079	7 ..
Boston	2,119,435	65 ..	Boston	21,161,341	48 ..
Buffalo	359,000	74 ..	Buffalo	12,992,000	25 ..
Cedar Rapids	234,000	40 ..	Cedar Rapids	2,564,550	15 ..
Chicago	4,878,600	28 ..	Chicago	88,054,800	16 ..
Cincinnati	252,295	49 ..	Cincinnati	8,967,316	32 ..
Cleveland	2,517,439	48 ..	Cleveland	18,180,078	7 ..
Columbus	157,473	21 ..	Columbus	4,675,303	1 ..
Denver	273,700	26 ..	Denver	5,332,675	12 ..
Detroit	1,506,000	38 ..	Detroit	25,588,470	34 ..
Evansville	83,305	10 ..	Evansville	1,530,872	23 ..
Ft. Wayne	228,350	298 ..	Ft. Wayne	2,785,215	45 ..
Grand Rapids	124,505	5 ..	Grand Rapids	2,456,516	2 ..
Harrisburg	99,350	213 ..	Harrisburg	1,167,125	6 ..
Hartford	226,450	10 ..	Hartford	7,379,525	25 ..
Indianapolis	527,103	50 ..	Indianapolis	9,150,407	9 ..
Kansas City	876,060	100 ..	Kansas City	12,396,328	6 ..
Los Angeles	2,270,680	58 ..	Los Angeles	31,367,995	36 ..
Louisville	183,020	37 ..	Louisville	6,552,730	7 ..
Manchester	57,020	2 ..	Manchester	2,720,541	82 ..
Memphis	374,156	18 ..	Memphis	7,162,214	22 ..
Milwaukee	610,573	21 ..	Milwaukee	15,257,162	24 ..
Minneapolis	2,963,380	640 ..	Minneapolis	14,229,475	4 ..
Nashville	148,690	349 ..	Nashville	1,411,114	16 ..
Newark	1,169,285	43 ..	Newark	11,626,358	6 ..
New Haven	227,130	11 ..	New Haven	4,762,341	18 ..
New Orleans	120,111	38 ..	New Orleans	3,493,426	10 ..
Manhattan	14,338,519	99 ..	Manhattan	127,469,492	14 ..
Brooklyn	2,648,026	1 ..	Brooklyn	40,537,784	7 ..
Bronx	2,732,782	25 ..	Bronx	36,049,870	47 ..
New York	19,719,327	64 ..	New York	204,057,146	17 ..
Norfolk	89,731	2 ..	Norfolk	3,393,677	15 ..
Oakland	667,724	29 ..	Oakland	9,082,248	27 ..
Omaha	168,650	2 ..	Omaha	4,546,761	16 ..
Paterson	69,427	46 ..	Paterson	2,123,528	6 ..
Philadelphia	2,558,890	47 ..	Philadelphia	37,173,635	7 ..
Pittsburgh	514,800	40 ..	Pittsburgh	11,145,043	9 ..
Portland	712,110	44 ..	Portland	14,782,707	15 ..
Rochester	549,602	21 ..	Rochester	12,035,466	28 ..
St. Joseph	65,891	266 ..	St. Joseph	1,119,797	12 ..
St. Paul	312,850	25 ..	St. Paul	8,051,417	9 ..
St. Louis	1,608,373	153 ..	St. Louis	20,675,803	11 ..
San Antonio	158,174	4 ..	San Antonio	2,807,992	27 ..
San Francisco	1,088,126	9 ..	San Francisco	23,338,563	11 ..
Scranton	144,675	36 ..	Scranton	1,564,579	15 ..
Shreveport	80,694	229 ..	Shreveport	1,522,633	20 ..
South Bend	28,900	67 ..	South Bend	942,940	24 ..
Toledo	230,123	63 ..	Toledo	5,321,730	42 ..
Wilkesbarre	65,004	70 ..	Wilkesbarre	2,335,217	10 ..
Worcester	225,537	24 ..	Worcester	5,866,117	22 ..
Total	\$ 53,682,235	26 ..	Total	\$721,282,961	6 ..

Philadelphia Lumbermen in Social Reunion

The Lumbermen's Exchange held its usual social reunion on the last day of the year, in Griffith Hall, in the afternoon of Dec. 31. These gatherings are always largely attended by the members and friends, and a general spirit of good fellowship and camaraderie invariably marks this yearly festivity. At 12:30 p. m. an elaborate luncheon was served, after which came a high-class vaudeville show, which opened with some spirited

rag-time music on the piano, followed by some amazing performances by Charles Thompson, a clever juggler. John Devlin then evoked roars of laughter with his Irish songs and anecdotes, and Edna Brown, a sweet songstress, followed with her up-to-date songs. Billy Morse, a black-face comedian, contributed his roaring best, and Harry Alpigni, unsurpassed in his line, astounded his audience with some incredible sleight-of-hand tricks. Waley and Putnam, song and dance artists, wound up this most enjoyable last day of the old year's entertainment of the exchange.

Dogwood and Persimmon Shuttle Blocks

A considerable part of the American output of shuttle blocks goes to England. A recent consular report gives prices at Manchester, England. Persimmon in the log, 5-inch diameter and upward, is generally quoted at about \$14.60 per ton (2240 pounds), and dogwood about from \$17 to \$19.50 per ton. The majority of the shuttle-makers in the district buy the blocks cut from the wood in the United States, and these are seasoned for about six months and sent over in 200 to 300 gross lots. Sizes are as follows: 13½ by 1¾ by 1¾ inches and 12½ by 1¾ by 1¾ inches, an average price for which would be \$3.90 per gross for persimmon and \$6.30 per gross for dogwood.

Hardwood News Notes

◀ MISCELLANEOUS ▶

The Alabama Lumber Company has been incorporated at Alpena, Mich., with a capital of \$100,000.

The Saginaw Manufacturing Company, Saginaw, Mich., has increased its capital stock to \$200,000.

The Bridgeport Woodenware Manufacturing Company of Bridgeport, Ala., has gone out of business.

A new Philadelphia corporation is the Dresden Box Company, with an authorized capital of \$45,000.

The Bode Wagon Works, Cleveland, O., are planning an extensive addition to their plant at that place.

The Waldstein Lumber Company of St. Louis, Mo., has increased its capital stock from \$50,000 to \$100,000.

The American Woods Corporation of Owls Head, N. Y., has increased its capital stock from \$15,000 to \$25,000.

The S. A. Smith Manufacturing Company has been incorporated at Brattleboro, Vt., with a capital of \$150,000.

The Willson Manufacturing Company, manufacturer of meat blocks, has increased its capital from \$10,000 to \$30,000.

H. R. Lindaberry & Sons, manufacturers of baskets, have removed from Frenchtown, N. J., to East Burlington, N. J.

The Thompson Hardwood Lumber Company of Cincinnati, O., has increased its capital stock from \$30,000 to \$50,000.

The Ward Furniture Manufacturing Company of Fort Smith, Ark., has increased its capital stock from \$75,000 to \$100,000.

The Bond Lumber Company is the name of a new corporation at Covington, Ky., which will operate with a capital of \$300,000.

A new Chicago corporation is the Homer Brothers Furniture Manufacturing Company, which will operate with a capital of \$10,000.

The Giles Brothers Hardwood Lumber Company recently began operations at Forest Hill, La. The company will operate a sawmill.

The Carribean Manufacturing Company is the style of a new company incorporated at New Orleans, La., to manufacture picture frames.

The Courtade Piano Case Company of Hoboken, N. J., recently lost its piano factory at that place by fire which resulted in a loss of \$150,000.

The Thomas E. Coale Lumber Company, Pittsburgh, Pa., has been succeeded by the B. W. Cross Lumber Company, which is incorporated with a capital stock of \$5,000.

The Reap-Crawford Furniture Company is the style of a new incorporation at Pine Bluff, Ark. The incorporators are J. P. Crawford, John W. Reap and others. The capital stock is \$25,000.

The Philip A. Ryan Lumber Company of Memphis, Tenn., has been granted a permit to do business in Texas, with main office at Houston, Tex. The company will operate with a capital stock of \$75,000.

Instead of at Houston, as was stated in the Dec. 10 issue of HARDWOOD RECORD, the Farmer's Handy Wagon Company of Saginaw, Mich., manufacturer of the "Saginaw Silo," has purchased a site and is building a plant at Fort Worth, Tex. The corporate name of the company in that state is The McClure Company of Texas.

The directors of the Michelson & Hanson Lumber Company of Bay City, Mich., which operated for over twenty years at Lewiston and completed its timber cut about two years ago, have filed a petition for a dissolution of the corporation. The Michelsons and Hansons are still extensively engaged in lumbering at Grayling, Johannesburg and at Michelson, Mich.

◀ CHICAGO ▶

W. L. Martin of the Embury-Martin Lumber Company, Cheboygan, Mich., visited the local trade on Jan. 9.

E. M. Holland and C. E. Cartier of the Cartier-Holland Lumber Company, Ludington, Mich., spent Thursday of this week in the city.

W. A. Spencer, office manager for the Stearns Salt & Lumber Company, Ludington, Mich., has been in the city for the past few days.

Within the last two weeks art calendars were received from: Mowbray & Robinson, Cincinnati, O.; S. M. Bradley, Morehead, Ky., entitled "The Lady of the Lilies"; The John Dulweber Company, Cincinnati, O., "Sweet Sixteen," from a drawing by Harrison Fisher; Charles K. Parry & Co., "Tantallon Castle, Scotland"; H. R. Foster, Chicago, "An Anxious Moment"; Robert Black & Co., Bay City, Mich., "The Headland"; "Our Girl," from Duhlmeier Brothers, Cincinnati, O.; The Prescott Company, Menominee, Mich., "Violet"; Southern Pine Company of Georgia, Savannah, Ga., "A Sea Nymph," and one from the Skillman Lumber Company of Grand Rapids, Mich.; "When Venice Ruled the Sea," from Tickle, Bell & Co., Liverpool, England.

Practical office calendars came in from Barker & Co., Boston, Mass.; The Farley & Loetscher Manufacturing Company, Dubuque, Iowa, and C. L. Willey, Chicago.

A very fine leather wallet, together with a travel accident policy, is acknowledged from The G. W. Jones Lumber Company, Appleton, Wis.; a red leather memorandum book from Louis Wuichet, Railway Exchange, Chicago, and a black leather booklet from the Three States Lumber Company, Memphis, Tenn. Another useful remembrance was received from The T. Wilce Company, Chicago, in the form of a clock, and a "Daily Reminder for 1913" from the Edward Hines Lumber Company, Chicago. A pin cushion made of redwood burl with redwood bark in the center reached this office from the John D. Mershon Lumber Company, Saginaw, Mich. Mowbray & Robinson sent out two photographs of their Quicksand, Ky., band mills and lumber yards, which make very handsome office decorations, and the J. M. Card Lumber Company, Chattanooga, Tenn., remembered its friends with a good sized picture of its yards.

HARDWOOD RECORD acknowledges receipt of handsomely engraved Christmas and New Year cards, extending best wishes for its future prosperity from:

Tennessee Oak Flooring Company, Nashville, Tenn.; E. C. Atkins & Co., Inc., Indianapolis, Ind.; Louisiana Red Cypress Company, New Orleans, La.; B. Heinemann Lumber Company, Wausau, Wis.; G. D. Crain, Jr., Louisville, Ky.; Packages, Milwaukee, Wis.; F. A. Brewer & Co., Chicago; Oconto Company, Chicago; Saul Brothers, Chicago; S. F. Minter, Delaware, Va.; James Crowell, Newark, N. J.; Patricio Fargas, Barcelona, Spain.

Leon Isaacsen, president of the Yellow Poplar Lumber Company of Coal Grove, O., was operated on for appendicitis on the evening of Dec. 30. He has had the good fortune to recoup promptly from the surgery and is now on the rapid road to recovery. He expects to be again able to attend to business within a very few weeks.

The St. Louis Lumberman celebrated the twenty-fifth anniversary of its inception at a reception in suite 1103 Lumbermen's building, St. Louis, Mo., on Dec. 31, 1912.

W. S. Sterrett, sales manager of the M. B. Farrin Lumber Company, Cincinnati, O., favored HARDWOOD RECORD with a call on Jan. 4. Mr. Sterrett reports an excellent condition of business in Cincinnati.

W. A. Rockwell, manager and treasurer of the Harriman Manufacturing Company, Harriman, Tenn., called at HARDWOOD RECORD offices on Jan. 7.

C. E. Davis, sales manager of the Richland Parish Lumber Company and manager of the lumber department of the Mengel Box Company of Louisville, Ky., has been in town several days on business in the interests of those concerns.

H. P. Keith of the Keith & Hiles Lumber Company of Crandon, Wis., was in this city a couple of days in the early part of the week in conference with members of the local trade.

Godfrey Saunders of the Foreign Hardwood Company of London, England, was one of the recent distinguished visitors to the city.

W. A. Runge, general manager of the Merrill Veneer Company, Merrill, Wis., was in this city on Friday of last week in connection with the interests of that company.

J. Moffett, formerly buyer for Heywood Bros. and Wakefield Company, chair manufacturer of Chicago, has taken a position with Walter Dewitt of the Seaman-Kent Company, Ltd., Toronto. Mr. Moffett will assist Mr. Dewitt in administering the local affairs of that concern.

J. F. Mingea, Chicago manager of the Faust Brothers Lumber Company of Paducah, Ky., has been at the latter place for the past week in conference with his principals.

A. C. Wells and J. W. Wells of the J. W. Wells Lumber Company, Menominee, Mich., spent a few days in Chicago recently.

"Pointers" is the inscription on a booklet recently issued by James D. Lacey & Co., Chicago, Portland and Seattle. This book aims to give valuable information to prospective investors in timberlands.

E. W. Bartley, president of the Racine Lumber & Manufacturing Company, Racine, Wis., was in Chicago on Wednesday of this week.

F. D. Timlin of the Wheeler-Timlin Lumber Company of Wausau, Wis.,

and Chicago, was in the city two days this week in conference with his partner.

L. B. Hancock of John B. Ransom & Co., Nashville, Tenn., spent a few days the early part of the week in the city soliciting business.

A. H. Ruth, Chicago manager for the G. W. Jones Lumber Company, Appleton, Wis., will leave the early part of next week for a two weeks' trip through the South, visiting Memphis and Arkansas points.

➤ PITTSBURGH ◀

Hardwood prices remain very firm and higher quotations are looked for before long. Stocks everywhere are low. White oak has never been in such good demand. Lumber for manufacturing purposes is badly wanted. The market for low grade hardwood is especially good and stocks in this line have been pretty well cleaned out at the mills. Nearly all wholesalers look for a big business throughout this year.

C. E. Breitwieser & Co. are getting well established for a new firm at their headquarters in the Bessemer building, where Frank Smith, formerly of the Breitwieser & Wilson Company, will be hardwood manager.

I. F. Balsley of the Balsley & McCracken Company is feeling good over some nice orders which came his way lately. Chestnut has been a favorite among his buyers during the last few weeks.

The Mutual Lumber Company is getting some big orders for chestnut crating and boxing lumber. One of these this week brings the company \$3.50 per M more than the price quoted sixty days ago.

The Kendall Lumber Company will shortly begin developing its immense Chess tract of timber on the Cheat river and is now building a railroad up the Cheat river to facilitate this operation.

The Pickett, Hyde & Laggans Company has been organized by D. M. Hyde, until recently salesman for the Babcock Lumber Company of this city, and J. W. Pickett and F. C. Laggans of Johnstown, Pa.

Joseph J. Linehan has secured the exclusive agency in the Pittsburgh district for the splendid poplar and oak stocks of Mowbray & Robinson, whose seven plants are located at Quicksand and West Ervine, Breathitt county, Ky., on the Louisville & Nashville railroad.

John M. Hastings, president of the J. M. Hastings Lumber Company, is spending a few weeks in Nova Scotia overseeing the immense operations of the Davidson Lumber Company of which he is also president.

The Fester Lumber Company is a new hardwood concern with offices at 814 Bessemer building, organized by W. E. Foster and P. M. Franklin, who have been for ten years operating country mills in West Virginia, western Pennsylvania and Ohio. They have seven such operations going now. They will handle all their own product through the Pittsburgh office and also do a considerable wholesale business in hardwoods.

The Aberdeen Lumber Company has orders on its books for 9,000,000 feet of gum and cottonwood, which makes its president, J. N. Woodlett, extremely confident about the situation this year. The wagon manufacturing people and also other big hardwood using concerns have been very liberal with their orders and requisitions of late and promise to be all the year.

◀ BUFFALO ➤

Taylor & Crate have purchased a tract of about forty acres on the New York Central and Lackawanna railroads. This land was acquired for investment and to provide additional storage room for the firm's large stocks of hardwoods. The site recommended itself by reason of the rapid industrial growth of that part of the city and the railroad facilities afforded. The firm will continue business at the present yards for some time. It owns ten acres on Elk street and six acres on the river front at Hertel avenue.

John W. Welch came home from the Pacific coast for the holidays, having left the office of the Buffalo Hardwood Lumber Company last spring. He says that he is a member of the United States Pacific Lumber & Timber Company of Vancouver, with two logging operations on the Sound, which ship in logs to the Vancouver mills. He travels by water considerably nowadays and is often in Seattle. There is a proposition to make an \$8 rate on lumber from Puget Sound through the Panama Canal to New York, which he thinks will discount the all-rail rate about three to one on coarse lumber and two to one on siding and shingles. He is very enthusiastic over the country and will return in a few days.

The loss of the steamer H. S. Pickands by fire in Fairport harbor made it necessary for H. H. Salmon & Co. to bring in about 400,000 feet of maple all-rail. Manager F. T. Sullivan has the yard well-filled with hardwoods.

F. M. Sullivan has left for a trip to Chicago and will also visit Michigan. He expects to be away during most of the present month looking after purchases of lumber.

Miller, Sturm & Miller have received some good sized stocks of hardwoods within the past two or three weeks at their new yard. They report some trouble from a shortage of cars.

G. Elias & Bro. find a fair amount of trade in hardwoods at present, especially in oak. The building lumber demand has lessened considerably since the first of the year.

H. A. Stewart left early this month for West Virginia, where he will ship out some more oak and poplar for I. N. Stewart & Bro., remaining away for several weeks.

O. E. Yeager is busy at present looking after the affairs of the Chamber

of Commerce and closing up its yearly work, preparatory to his retirement from the office of president.

All the members of the Hugh McLean Lumber Company are in Buffalo at present to hold the annual meeting of the Bathurst Lumber Company, which, it is understood, transacted only routine business.

Anthony Miller looks for a pretty good year in hardwoods. His trade has been quite active so far this month, and the outlook is considered very fair for better business later in the month.

Blakeslee, Perrin & Darling have been shipping out some good stocks of oak this month. They are also selling chestnut, which is moving out about as fast as it comes in.

The Buffalo Hardwood Lumber Company is getting a good deal of oak and other hardwoods from the Southwest and states that trade so far this year has been very satisfactory.

Horace F. Taylor represented the Buffalo lumbermen late last month at the Washington hearing on the step over privilege. It is hoped that the commission will render an early decision.

The Standard Hardwood Lumber Company is getting in its usual large stocks of oak and chestnut from the South and its new yard now has several million feet of hardwoods.

◀ NEW YORK ➤

Of interest to manufacturers of trim throughout the whole country is the action of Justice Ford of the Supreme Court of New York, who recently dismissed the suit brought by John Savage, president of the Joint District Council of the United Brotherhood of Joiners of America, against Henry A. Potter, president of the American Anti-Boycott Association of New York, which sought to restrain the anti-boycott association from prosecuting cases on behalf of its members. This action of the court establishes the right of members of the anti-boycott association to legal protection in the matter of open shop operation. The anti-boycott association has been working on behalf of several large trim and millwork manufacturers whose product, it is alleged, has been barred out of Manhattan through the combination of the labor unions and certain manufacturers. Several suits have been brought by the anti-boycott association on behalf of trim manufacturers, members of the association, against the Brotherhood of Carpenters. These suits seek to restrain the boycotting of woodwork of these firms.

T. S. Miller, manager of the hardwood department of the Stevens-Eaton Company, wholesaler of 1 Madison avenue, returned last week from a trip to the company's shipping yard at Elkins, W. Va. The company is carrying a fine stock of hardwoods in its yard at that point and recent improvements which it has made there places it in fine shape for giving quick service to its customers. Being located at a railroad junction it is suffering less from car shortage than most shippers. Mr. Miller reports all the mills in that part of the country busy and the hardwood market generally strong.

William Schuette & Co., wholesalers of 220 Fifth avenue, announce the appointment of John A. Daley to assist William Schuette in the management of the local sales office at the above address.

T. H. Griffin of Price & Pierce, lumber firm of London, sailed for home on the White Star liner "Celtic" last week. Mr. Griffin had been touring the American lumber markets for the past two months.

J. W. Love of Love, Boyd & Co., who makes his headquarters in New York, spent the holidays at his home in Nashville.

◀ PHILADELPHIA ➤

J. Gibson McIlvain of J. Gibson McIlvain & Co., says, considering that 1912 was presidential year and the first half anything but profitable trading, the year's business on the whole has been very satisfactory, and unless something unforeseen at this time occurs to cloud the business horizon, there is every reason to believe that business in 1913 will be a record breaker.

J. W. Floyd of The Floyd Olmstead Company, reports a banner year's business and sees no signs of a diminished activity for 1913. Instead of issuing a souvenir calendar as heretofore, this firm this year presents to its customers and friends a handsome leather backed portfolio with files for private and valuable papers.

Fisher Dalrymple, secretary and treasurer the S. B. Vrooman Company, Ltd., testifies to the best trading for years. Fortunately the company was well supplied with mahogany during a shortage of this wood and was able to meet a suddenly increased demand.

Robert W. Schofield of Schofield Brothers reports a big year's business and the month of December the best they ever had. They are anticipating continued prosperity.

George M. Spiegle of George M. Spiegle & Co. says he has no fault to find whatever with trading, and everything looks promising for 1913.

"No trouble to get business," says Clem E. Lloyd; 1912 has proved a prosperous year for him.

A. T. Bliss of Bliss & Van Auken, New York, was a recent visitor to Philadelphia and a participant in the New Year's festivities of the Lumbermen's Exchange. He says business with them has been very satisfactory and they are much encouraged over the outlook.

The Kendall Lumber Company has given up its Philadelphia office and all eastern business will be handled from the home office in Pittsburgh, Pa., where W. J. Glantz, Philadelphia representative, will hereafter make his headquarters.

J. W. Turnbull of the J. W. Turnbull Lumber Company reports a good year's business and the Bristol, Sash and Door Company, Bristol, Tenn., which it represents, is pushed to the limit getting out orders. It will remove to the new Stock Exchange building in February.

William H. Fritz of Wm. H. Fritz & Co., says although business was a little disappointing in certain lines the showing over 1911 is gratifying.

The Baldwin Locomotive Works have just closed an order for 123½ eight locomotives for the Santa Fe Railroad Company, calling for an expenditure of \$1,760,000. The Baldwin works are pushed to nearly the maximum capacity getting out orders for spring delivery.

Jesse Roberts, a prominent lumberman of this city, died on Dec. 20. He was seventy-five years old.

Jerome H. Sheip has incorporated his business under Pennsylvania laws, capitalized at \$150,000. It will hereafter trade as the Jerome H. Sheip Company, Inc.

◀ BOSTON ▶

The I. N. Chase Lumber Company, Boston, has been incorporated to succeed to the business of the Hayford-Chase Company. The capital stock is \$40,000 all paid in. Mr. Chase is very well known in the East. He became associated with A. W. Hayford in 1890 and remained in his employ until 1908, when he started a general commission business under his own name. In 1909, he again became associated with Mr. Hayford under the firm name of Hayford & Chase. Later this business was incorporated under the name of the Hayford-Chase Company.

A bad fire in the lumber district of Lowell, Mass., on Jan. 2 caused a heavy loss to the Pratt and Forrest Company and to A. L. Brooks & Co. of that city. The fire started in the boiler house of the former company and made great headway before it was discovered. The loss, while heavy, was well covered by insurance.

The Johnson-Jordan Lumber Company, Malden, Mass., has purchased the entire stock, plant, yards and good-will of the Interstate Lumber Company of the same city and will continue the business of the latter concern. The Interstate company made an assignment a few weeks ago.

Le Baron Hathaway, president of the Robbins Lumber Company, Plymouth, Mass., died late in December in Naples, Italy, where he had gone with his father, the latter being in poor health.

Fire broke out in the dry-kilns of the Wason Manufacturing Company, Brightwood, Mass., late in December. The dry-kilns were destroyed as well as the storage sheds where the company carried a large stock of lumber. A stock of nearly 3,000,000 feet of lumber was burned. The company manufactures cars.

The violin case manufacturing plant in Charleston, N. H., owned and operated by the Superior Tap Company, has been totally destroyed by fire.

The Fuller-Smith Lumber Company, Boston, has been incorporated with a capital stock of \$50,000. The incorporators are: Charles W. Smith, Herbert A. Fuller and James R. McDowell.

The Webster Lumber Company, Watertown, Mass., has been incorporated with a capital stock of \$25,000 by William A. Webster and John E. Whitecomb.

◀ BALTIMORE ▶

Stephen S. Mann and Frank A. Parker, partners in the hardwood firm of Mann & Parker, which went into liquidation some months ago, and the affairs of which are still in the hands of a trustee, but who have been discharged from bankruptcy, have formed the Mann & Parker Lumber Company, with offices on the sixteenth floor of the Continental building. The company will be incorporated with a capital stock of \$25,000, and will engage in the wholesale trade as before, but is resolved to fight shy of sawmill operations, which are chiefly blamed for the previous embarrassments.

Rittler Brothers, formerly the Rittler Box Company, with a factory on South Carolina street, have filed plans with the building inspector for a three-story warehouse, 60 by 100 feet, which they intend to erect in the rear of their present factory. The structure will be of reinforced concrete and cost \$10,000.

C. E. Williamson, who represents Richard P. Baer & Co., in the Central West, making his headquarters at Cincinnati, was in Baltimore on a visit to the home office during the holidays, as was N. J. Warner, who is in charge of the Asheville office for the firm. Both reported business in their respective territories as decidedly active.

◀ COLUMBUS ▶

At Norwalk, O., the McCrillis Handle Company is planning to enlarge its plant. Work on the new addition has been started. The company has been operating a branch plant at Nellie, O., in Coshocton county, but has been unable to secure a lease on the building any longer and will enlarge its Norwalk plant to take care of the business. The McCrillis Handle Company was started in 1862 by Milo McCrillis and was incorporated in 1900. Milo McCrillis is president; A. V. Andrews, vice-president; F. H. Fox, secretary-treasurer, and L. A. Heston, superintendent and manager.

The E. M. Strucker Lumber Company of Cuyahoga Falls, O., has been incorporated with a capital stock of \$25,000 to deal in lumber and building materials. The incorporators are E. P. Otis, E. E. Otis, C. F. Beery, M. R. Kinney and L. R. Barnes.

The Smith-Lingham Lumber Company of Cleveland, O., has been incor-

porated with a capital stock of \$25,000. The incorporators are J. L. Smith, L. C. Lingham, Harry E. Hammar, C. Von Bessler and Phoebe A. Price.

The B. A. Leach Lumber Company of Toledo has been incorporated with a capital stock of \$15,000 to deal in lumber. The incorporators are Oscar A. Leach, B. A. Leach, Vivian A. Leach, A. M. Leach and Ralph B. Leach.

The new quarters of the Columbus Builders' and Traders' Exchange, located in the Arcade building, on North High street, were opened recently by a formal house warming. The exchange rooms are modern in every respect and are very commodious. The quarters consist of a dining room, assembly room, ladies' reception room, consultation and directors' room, pian room, kitchen and serving room.

R. W. Horton, sales manager for the central division of the W. M. Ritter Lumber Company, reports an active demand in hardwoods. He says the December business was far in advance of any December in the history of the company. The demand is good for all grades of hardwoods and advances have been made in quartered and plain oak, chestnut and poplar. Stocks are light both in the hands of manufacturers and retailers, and the only drawback is the car situation, which shows some improvement recently.

W. M. Ritter, head of the company bearing his name, left late in December for a hunting trip in the South.

H. M. Hayward of M. A. Hayward & Son says the demand is good for all hardwoods and there is a slight advance in price; in fact, the demand appears to be better than at any time during the past few weeks. The future outlook is considered good.

W. L. Whitacre of the Whitacre Lumber Company says there is a good demand for hardwoods. Retailers are buying some, although stocks are a little heavier than usual.

F. Everson Powell of the Powell Lumber Company says there is a good demand for hardwoods with prices holding up firm. Stocks are scarce, but manufacturers are cutting rapidly and there will probably be an increase in stocks soon.

W. B. Sisson, sales manager for the Sowers Leach Lumber Company, says trade is good, especially in hardwoods. Inquiries are coming in well and the outlook for future business is good.

Since the tragic death of J. K. Sowers, president and general manager of the Sowers-Leach Lumber Company, the concern has been reorganized. Ian H. Sowers, brother of the late president, has been elected to the position of president; D. S. Benbow is secretary, treasurer and general manager, and W. B. Sisson, sales manager. B. A. Leach, formerly connected with the company, sold his interest in September and has organized a lumber concern in Toledo.

John R. Gobey, president of John R. Gobey & Co., reports a good demand for hardwoods. Prices are strong and inclined to advance. Stocks are light everywhere, and there is still considerable trouble with the car shortage.

At Logan, O., the Snyder Manufacturing Company, a furniture manufacturing concern, was totally destroyed by fire recently. The loss is estimated at \$100,000, with insurance of about half. The machinery was entirely destroyed and nearly 400,000 feet of lumber was burned. The fire started in the dry house and spread rapidly to other parts of the plant. Arrangements are being made to rebuild the plant at once.

During 1912 the value of buildings for which permits were issued in the city of Columbus was \$4,675,303, which is \$7,061 more than that of the year previous. The number of permits issued during the year was 2,657, or 18 less than in 1911. The increase of building during December, 1912, over that in the same month of 1911 is noticeable. Last month the valuation was \$157,473 and the number of permits 122. In December, 1911, the valuation was \$129,637 and the number of permits 78.

◀ CINCINNATI ▶

Harry Meade, local representative of the Babcock Lumber Company of Pittsburgh, Pa., has just returned from a trip to the company's mill at Tellico Plains, Tenn. He says that the big band mills are running full time and are cutting about 100,000 feet per day with shipments about equal.

W. E. Heyser of the W. E. Heyser Lumber Company, just in from a trip, states that his company is doing the biggest business in its history. He expects to see conditions even better in a couple of months.

The Reimeier Lumber Company reports a steady and satisfactory demand for most all hardwoods. It has received quite a nice lot of new lumber during the past couple of weeks and has much more awaiting shipment from inland mills.

The E. C. Bradley Lumber Company reports that trade has been fine during most of the past season and especially so during the latter part of the year. Mr. Bradley stated that he is looking for a big year for 1913.

At the yards of the Midland Lumber Company, located on the outskirts of the city, one of the up-to-date lumber yards can be found with a very good sized stock of hardwoods. The company states that it is well satisfied with business conditions and has been getting its full share of trade.

The Tennessee Lumber and Coal Company reports that it is doing everything possible to increase the output of its band mill, finding it necessary to meet the increased demand for all kinds of hardwoods and white pine.

◀ INDIANAPOLIS ▶

Mr. and Mrs. W. W. Knight are home from their wedding trip to Indiana and have taken apartments in the Buckingham.

The name of the Root Furniture Company at Shelbyville has been changed to the Albert Furniture Company.

Building operations in the city during 1912 amounted to \$9,150,407 as compared with \$8,349,477 in 1911, establishing a new record for the city.

The first big patron of the parcels post out of Indianapolis was the Interior Hardwood Company, which, on Jan. 2, mailed several hundred samples of hardwoods to various points throughout the United States.

The property of the Ford & Johnson Company, furniture manufacturers, has been sold by Elmer W. Stout, receiver, to Harry Wehmer of Cincinnati, representing the bondholders. The consideration was \$496,000.

With an authorized capitalization of \$8,000, the Paoli Hardwood Company has been organized and incorporated at Paoli and will conduct a hardwood manufacturing business. Those interested in the company are George M. Wells, W. H. Coppock and A. M. Wells.

J. V. Zartman, secretary of the Indiana Manufacturers' and Shippers' Association, has opened a permanent office in the Lombard building. The association will have its annual banquet here Jan. 16.

J. A. Ross, M. C. Caldwell and J. S. Powell have organized the Midland Manufacturing Company at La Porte to manufacture woodenware. The company has been incorporated with an authorized capitalization of \$25,000.

After a two weeks' shut-down for repairs, the plant of the Udell Works, manufacturers of furniture, ladders, etc., has resumed operations. The company reports an excellent business during 1912.

◀ MEMPHIS ▶

The Valley Log Loading Company handled during 1912 11,703 cars of logs and it is estimated that about twenty per cent of these logs went to points other than Memphis, with the result that the receipts here were slightly more than 9,000 cars. All of this timber came over the Yazoo & Mississippi Valley lines of the Illinois Central System. The movement was reasonably free during January and February, when 1186 and 971 cars, respectively, were loaded. In March the total was 671. During April, May, June and July the movement was very much restricted as a result of the conditions growing out of the flood in the Mississippi valley. Cars loaded during this period numbered 400 for April, 564 for May, 787 for June and 755 for July. After that the movement increased until December when there was a reduction on account of the inability to secure cars for the prompt handling of log shipments. The totals for the last five months were: August 1089, September 1138, October 1286, November 1464, December 1152. The company is loading logs now at a very rapid rate and it is confidently stated by the officials of the company that the amount of timber loaded by it for Memphis will be the largest on record for the month of January unless there is some unforeseen development. It is estimated that the average output of a car of logs is about 4300 feet. It will therefore be seen that the movement of timber to Memphis over the Yazoo & Mississippi Valley line of the Illinois Central system amounts to slightly more than 38,000,000 feet.

The plant of R. J. Darnell, Inc., is temporarily closed down on account of inability to bring timber to Memphis. This firm owns extensive timberland holdings near Batesville, Miss., and is handling its logs over the Batesville Southwestern and the Illinois Central. It has been impossible to secure sufficient cars to keep the firm in timber and it has been necessary, on more than one occasion recently to close down pending the receipt of more timber.

The firms in Memphis which depend upon the western roads for their timber are meeting with slightly better results than a short time ago. This is due to the fact that the car situation is somewhat improved.

The hearing in the case of the Anderson-Tully Company, involving the issuance of through bills of lading on export shipments over lines west of the Mississippi river, did not result in anything definite. Special Examiner Marshall of the Interstate Commerce Commission was in Memphis and a number of prominent lumbermen appeared before him and gave testimony bearing upon the subject at issue. Owing to the limited time, however, it was impossible to present all of the evidence and the hearing was adjourned *sine die*. It is anticipated, however, that there will be a continuation of the presentation of evidence at a comparatively early date. Exporters here are of the opinion that, as the commission has made the ruling that it will force the railroads in Texas to issue through bills of lading on cotton shipments if the steamship companies are willing to honor these documents, it will hold a similar view with respect to shipments of lumber intended for export. They are therefore anticipating victory when the decision is handed down in this case. It is suggested that the next hearing will be held in New Orleans.

W. H. Greble of the Greble-Sine Lumber Company has recently returned from a trip to Mississippi and Arkansas. His firm is handling the output of several mills in these states. He says that the car situation is considerably improved, especially on the Iron Mountain between Helena and McGehee. He also emphasizes the fact that there is a decided shortage of dry lumber in the Memphis territory. He reports a good demand.

Building operations in Memphis during 1912 involved a total expenditure of \$7,159,214.15. The gain amounted to about 22 per cent as com-

pared with 1911 when the total was \$5,869,146. The actual gain in money value was \$1,300,068.15. The best showing was made in August when the total was \$1,101,595. The smallest was in January, which recorded a total of \$252,170.

The Green River Lumber Company is enlarging its offices in North Memphis considerably. Several rooms are being built and a new vault is also being installed. The office was originally built for the Green River Lumber Company, but it is also being used by S. M. Nickey and his assistants. Mr. Nickey is interested in the Green River Lumber Company.

The St. Louis, Iron Mountain & Southern has begun the operation of trains over the Marianna cut-off. This runs from Memphis to Marianna. It materially shortens the distance between Memphis and St. Louis and New Orleans. In addition to providing another outlet for export shipments of lumber the cut-off operates through a section which is quite rich in timber resources and will make the development of these possible. There has been considerable activity in timber lands in the territory which is opened up by this line.

J. T. Willingham, president of the National City Bank, has asked that he be relieved from his duties. C. T. Whitman of Earle, Ark., who is prominently identified with the hardwood lumber industry of that section, is scheduled as his probable successor.

Miss Frieda Moore has been elected assistant secretary of the Builders' Exchange and was able to secure the position only upon her agreement to resist the wiles of Cupid for an entire year. The exchange has lost so many of its assistant secretaries through the marriage route that the directors extracted a pledge from Miss Moore to this effect before tendering her the position.

One of the principal problems confronting the lumbermen from a purely local standpoint is that of securing lower rates on lumber insurance. This subject has been discussed with considerable vigor for some time and the lumbermen have about reached the point where they are willing to give some of their insurance to outside companies instead of confining their insurance to the board companies, if the latter do not show some disposition to make concessions. The rates are regarded as entirely too high and out of all proportion to those obtaining in other cities with which Memphis has to compete. What has worried the local lumber interests more than anything else has been the failure of the board companies to furnish the lumbermen with details regarding the amount of money paid in premiums and the amount paid by the insurance companies covering losses. There have been many promises but no executions. The lumbermen are quite determined in this matter and it is expected that very definite developments will occur in the near future. Already some insurance is being placed with non-board companies.

The year promises to be one of marked activity in opposition to the proposed advances in freight rates on the part of the railroad companies operating through this gateway. Advances of from one to five cents per hundred pounds have been announced in practically every direction and the Lumbermen's Traffic Bureau, according to present indications, will have its hands quite full. Petitions have been filed before the Interstate Commerce Commission in one instance and it is expected that every single advance proposed by the railroads will be fought before that body.

The Tennessee Hoop Company has increased its capital stock to \$100,000 and is now building a large plant for the manufacture of slack hoops, heading and staves. The plant of the Memphis Stave Company will be continued in operation on Henning island, but the hoop plant of the old Tennessee Hoop Company will be dismantled and the machinery removed to the new plant. S. B. Anderson is president, C. J. Tully vice-president, Andrew Harris secretary and treasurer, and Mr. Taylor general manager. The latter was formerly vice-president of the old company.

◀ LOUISVILLE ▶

Most local hardwood men, who have discussed the subject of substituting flat rates for the milling-in-transit arrangement in effect in most manufacturing cities of this section, have agreed that flat rates would be preferable, provided they were placed on the right level. The difficulty, of course, would be found in arriving at a mutually satisfactory conclusion as to what satisfactory rates would be.

The Louisville Hardwood Club is considering arranging a series of talks by consumers of lumber, with an idea of developing the views of users as to difficulties, if any, they have experienced, and ways in which service to them by lumbermen could be improved. It is believed the talks would be very interesting and helpful.

Members of the W. P. Brown & Sons Lumber Company have secured control of the Robe Lake Lumber Company of Memphis, Tenn., and have changed its name to the Brown Brothers Timber and Land Company. The concern does not expect to operate, but will hold its property, a large block of hardwood timber in Arkansas, for investment purposes.

The Big Sandy and Kentucky rivers have been filled up by recent rains and a tide has developed which will bring down a lot of logs. A number of mills on both rivers, which have been closed because of lack of material, will start operations again on the strength of the heavy receipts of logs.

The Alfred Struck Company of Louisville, large manufacturer of interior finish, has increased its capital stock from \$75,000 to \$175,000. The concern does not expect to enlarge its plant, but requires the additional capacity on account of its expanding business.

Thomas Moore of Paris, Ky., has bought some Perry county timber and

will erect a mill at Hazard, according to a report from that town is getting to be a considerable manufacturing center.

The Nigh Lumber Company of Ironton, O., has bought a lot of timber in eastern Kentucky and will build a railroad to the Big Sandy river, floating the timber down to its mill at Ironton to be sawed.

According to information which has reached Louisville, the annual convention of the National Wholesale Lumber Dealers' Association, which was held here in 1912, will take place in Atlantic City this year. Nashville was one of the leading applicants for the convention, but it was thought best to have it in the East this time. Tennesseans will probably have an opportunity to entertain the wholesalers next year if they so desire.

◀ NASHVILLE ▶

The 1912 building permits for Nashville totaled more than \$300,000 over those for 1911 and yearly comparisons for the past nine years show a steady increase. Nineteen hundred and twelve broke the record for the entire period mentioned and with the prospects now materializing for the immediate future, there will undoubtedly be still greater activity during this new year in the way of erecting business houses especially, as well as in the opening of populous suburbs and other developments of an important character.

Fire recently caused \$12,000 damage to the plant of the Standard Box Company, with no insurance to cover the loss. Much lumber and material in the yards were also destroyed and the fire was with difficulty kept from adjoining establishments. The origin of the fire is unknown but incendiarism is suspected as several recent fires at this same plant have been prevented in their incipency. Damage to the extent of \$1,000 was done at the same time to the Home Building & Manufacturing Company near by. The Standard plant was owned by H. Schwartz.

Work has been commenced on a four-story brick warehouse for the Davidson, Hicks & Greene Company, to cost \$20,000. Part of the building will be occupied by the Standard Furniture Company as a wholesale display room and the remainder of the building will be sub-rented.

The boiler of the mill of Lantz Brothers, near Lawrenceburg, exploded recently resulting in the death of one unknown workman and the destruction of \$1,000 worth of property.

◀ BRISTOL ▶

The R. E. Wood Lumber Company is completing a large band mill at Fontania, N. C., near where it has extensive timber holdings. The company closed out its operations in Carter county, Tennessee, south of Bristol.

Numerous buyers were on the local market this week, following the passing of the holiday season. The buyers report much difficulty in securing stock, due to the shortage that exists in this section and the fact that many of the mills are oversold.

The Bailey Lumber Company, which was recently organized at Bluefield, W. Va., will at once erect a woodworking plant in that city.

The Waynesville Lumber Company is making splendid progress with its new mill at Waynesville, N. C. O. H. Vial, formerly of this city, is general manager of the company and in personal charge of the work.

Among the buyers on the Bristol market this week were Charles C. Cross, a wholesale dealer of Philadelphia, and Mr. Allening, representing the Kile & Morgan Company of Providence, R. I.

The car situation in this section is unchanged. Considerable difficulty in securing cars is reported by some of the lumbermen, while others at shipping points where many cars are unloaded report that their wants are well taken care of by the railroads. Traffic is now the heaviest it has been in years, according to the railroad traffic agents.

The Guilford Lumber Manufacturing Company has purchased an additional tract of timber, located near Troy, N. C. The company's general offices are in Greensboro, N. C.

The band mill of the Peter-McCain Lumber Company, in this city, resumed operation this week after being idle for the past two weeks.

◀ ST. LOUIS ▶

Building operations in St. Louis for 1912 show a gain of \$2,068,848 over the previous year. The statement issued by the building commissioner shows that 8,593 permits were granted during the year for new buildings, repairs and alterations, the estimated cost of which aggregates \$20,676,403. In 1911, 8,982 permits were issued for buildings and alterations to cost \$18,607,555. The issue for the month of December aggregated \$1,608,373, a gain of \$972,965 over December, 1911, when the aggregate was \$635,408.

The Fidel-Ganahl Lumber Company is making repairs to its Broadway yard, which suffered from fire recently.

E. H. Luehrmann of the Chas. F. Luehrmann Hardwood Lumber Company says his company is having a satisfactory run of business. It is ready for the coming spring business, as its yard is pretty well stocked up with nearly all items on the hardwood list.

L. M. Borgess, secretary of the Steele & Hibbard Lumber Company, who is on the road nearly all the time covering the northern territory for the company, returned from a trip in time to spend the holidays with his family and also to act as one of the tellers at the Lumbermen's Exchange election. He reports a most satisfactory condition in his territory. Plain oak and ash are in good demand. Prices are steady on all items.

According to statistics given out by the Merchants' Exchange, receipts of lumber during the year 1912 were 179,466 cars by rail and 481,000 feet by river. During the year 1911 the receipts were 179,976 cars by rail and 1,382,000 feet by river. This shows a big falling off in receipts for 1912. During the year 1912 the shipments were 119,007 cars and 704,000 feet. For the first five months during 1912 there were no receipts by river. During 1911 the receipts by river began in January.

E. W. Blumer, sales manager of the Lothman Cypress Company, believes this year will be a good one for cypress. He states that there are plenty of cars to be had now, and that shipments from the mills are coming in well.

One of the optimists as to hardwood conditions during the present year is W. W. Dings of the Garretson-Grease Lumber Company. He states that already there is a good demand for high-grade stock. This class of material is scarce and fancy prices can be obtained for it.

The result of the election of officers for the year 1913, held by the Lumbermen's Exchange, on Jan. 2, resulted in the election of the following: President, F. H. Smith; vice-president, W. W. Milne; directors, T. E. Powe, Franz Waldstein, R. F. Krebs, E. H. Luehrmann, H. A. Boeckeler, T. E. Youngblood and C. E. Thomas; board of arbitration, W. W. Dings, J. A. Reheis, C. D. Borrowman, Frank Liebke and L. E. Cornelius. The new board of directors will meet Friday, Jan. 10, to elect the treasurer and secretary for the year.

President Thos. E. Whitmarsh of the Lumbermen's Club has appointed the following committees for the year:

ENTERTAINMENT COMMITTEE—Julius Seidel, chairman; C. S. Casbro, Max Mosher.

MEMBERSHIP COMMITTEE—C. M. Jennings, chairman; Thomas W. Fry.

STATISTICAL COMMITTEE—W. F. Biederman, chairman; Thos. J. Noser, Chas. L. A. Beckers.

TRAFFIC COMMITTEE—Thos. E. Powe, chairman; C. C. Schilling, C. L. Robinson.

ARBITRATION COMMITTEE—R. B. Beardon, chairman; C. H. Holekamp, W. W. Dings.

PUBLICITY COMMITTEE—W. E. Barnes, chairman; Chas. E. Price, Dr. Hermann von Schrenk.

COMMITTEE ON PUBLIC AFFAIRS—Henry G. Rolfes, chairman; Chas. P. Conger, Henry O'Neil, C. A. Antrim, Frank Goepel.

◀ MILWAUKEE ▶

With a building record of \$15,400,000 for 1912, Milwaukee leads every city in the country in the gain of the amount represented by building permits. The \$3,110,000 gain over 1911 represents about twenty-seven per cent, which exceeds that of any other city.

The H. McIwen Box and Veneer Company has been incorporated at Shawano with a capital stock of \$25,000. The incorporators of the new concern are H. F. W. McIwen, E. W. McIwen and A. K. McIwen. Articles of incorporation have been filed with the secretary of state.

The Morton Salt Company is having a barrel factory erected at Superior to manufacture barrels for its own product. The factory will have a capacity of 1,200 barrels per day and will employ from twenty-five to fifty men.

The unusual rush of orders at this season has compelled the Webster Manufacturing Company, manufacturers of chairs at Superior, to declare the usual holiday recess off this year and make a material increase in its working force for the present.

The Stolle Lumber Company has succeeded the Stolle-Brandt Lumber Company of Tripoli, having taken over the mills and other property and continuing the business. The erection of a large veneer factory is contemplated.

The Mandt Wagon Company of Stoughton, local branch of the Moline Plow Company, is having a large building constructed which it will use as a dry-kiln.

Having finished the season's cut, the mill of the Shawano Lumber Company, Shawano, Wis., has closed down for the season. The crating mill is to be transferred to the veneer factory. Negotiations for the sale of the sawmill to the McIwen Box and Veneer Company are pending.

The Kneeland-McClurg Lumber Company, recently organized at Phillips with \$1,000,000 capital invested in taking over the holdings of the John R. Davis Lumber Company, has closed a deal with M. J. Bell of the Bell Lumber Company of Ashland and Minneapolis, whereby the latter buys the stumpage on the land being logged by the Phillips concern.

The Merrill Veneer Company, Merrill, Wis., has again resumed operations and the mill is running at full capacity. The plant was closed down several weeks ago on account of the lack of raw material.

The new sawmill of the Mosinee Land, Log and Timber Company at Mosinee is almost completed and operations will commence shortly. A steam log hauler, with a capacity of ten to twelve sleighs at a time, is bringing the logs from the two camps, three and seven miles from the city.

A force of men is cruising the timber lands of the Atwood Lumber Company, the Chippewa Lumber & Boom Company, and the Mississippi River Lumber Company, and it is said that the Edward Hines Lumber Company is negotiating for the purchase of the timber on about 130,000 acres. The timber is mostly hardwood and hemlock, and should the deal be consummated the sawmill at Hayward would be operated for several years to come. A railroad will possibly be built from Hayward into the timber to connect with the sawmill.

The Holt Lumber Company, of Oconto, has acquired fifteen forties of

timber land in Marinette county from C. Constone & Son, of Peshtigo. The Holt company will log the timber next winter with other timber it owns in the same vicinity.

The Rice Lake Lumber Company, Rice Lake, Wis., recently entertained about two hundred employees at the main office of the company with a banquet, followed by a party at a local theater. This is an annual event and has helped greatly toward establishing the mutual goodwill and cordiality between this company and its employees.

Edward Bradley, a retired lumberman and well-known citizen of Milwaukee, was stricken with apoplexy Christmas morning and died several days later. He was seventy years old.

Captain David Jack, vice-president of the Gurney Refrigerator Company of Fond du Lac, died recently at Rochester, Minn., as the result of pneumonia following an operation. Three special interurban cars left Fond du Lac with employees of the company who attended the funeral services at Oshkosh. Mrs. Jack died about six weeks ago.

A wireless from the liner *Orteric*, seven days this side of Yokohama, reported the death of O. B. Osborn, vice-president of the Berlin Machine Works of Beloit. Although Mr. Osborn had been in poor health for some time, his death was a great shock to his friends. He started on a combined business and pleasure trip for the Far East about the middle of November. Mr. Osborn is survived by his wife, two sons and one daughter. The body has been embalmed and is being returned to Beloit for interment.

◀ DETROIT ▶

Total building operations in Detroit during 1912 reached \$25,588,470, a new high mark for the city. In 1911 the total was \$6,575,800 lower than the year just closed. During December permits for new additions and buildings amounted to \$1,506,000. Of these permits 242 of the new buildings are to be of wood construction and of the additions 46 are to be of wood construction.

Thomas Forman of the Thomas Forman Company says that the flooring trade started the new year in flourishing condition. The Forman factory is busy with a good volume of orders on hand and inquiries plentiful.

The Dwight Lumber Company's flooring factory is also running full time and Secretary John Lodge reports that trade conditions were never better. The flooring men are looking for a continuance of good business right through 1913.

J. M. Clifford says that while stocks are moving fast, a good deal of difficulty is being experienced by lumber dealers in getting railroad shipments. A railroad embargo at Toledo on shipments from the South has seriously affected Detroit dealers, and although this embargo has been lifted, many southern shippers of hardwood lumber have been holding back. The result is that many dealers are running extremely short on stocks. Mr. Clifford says that he expects further advances in prices of all hardwood lumber with the exception of poplar. The later stocks are quite plentiful and the demand is comparatively small.

George I. McClure reports that business is very good in all kinds of hardwoods, with birch, maple and elm leading. In the first three days of the new year Mr. McClure sold more than 350,000 feet of hardwood, which he considers not a bad start.

Mr. Scheurman of the Scheurman Lumber Company of Saginaw was a visitor in Detroit last week.

Detroit and Indiana capitalists have purchased 7,000 acres of hardwood timber land in Springdale township, Manistee county, from the Fruit Belt Land Corporation. It is expected that it will take five years to clear the land. This is the largest single tract of hardwood left in Manistee county.

The Fox & Mason Furniture Company of Corvua has increased its capital stock from \$260,000 to \$300,000. At present the company is employing 150 men. The higher grades of furniture, mostly Circassian walnut and mahogany, are made at factory "A," while imitation quartered oak goods are made at factory "B." An addition to factory "A" will probably be built within the next few months.

The Hardwood Market

◀ CHICAGO ▶

Market conditions in Chicago are typical of conditions throughout the country. Considerable slackening in orders was noted during the early part of the past fortnight, but large concerns are gradually closing their 1912 business and are again getting back into the market in first-class shape. The volume of orders for the next week or ten days will probably be comparatively light, but they will come in in increasing numbers and size. Every confidence is expressed that the present firm prices will hold, at least, until the advent of the summer season, although local yard men, wholesalers and mill representatives state that they can not see any possibility of the present shortage of supply being entirely eliminated before that time.

The usual order of strength of the various woods is being maintained, as it has been for several months past, and plain oak is about the strongest item, quartered oak continuing to increase in demand and

price. All the northern woods are in pretty firm request, birch and maple being the leaders. Red gum still shows some weakness, although some concerns report a strengthening in demand during the last week or two.

◀ NEW YORK ▶

The hardwood market at New York which has shown such strength for the greater part of the year just closed, continues strong and active. The fact that low grades are in better demand is by no means the least encouraging feature. Supplies are difficult to attain and the report is that stocks at mill points are low and broken. The demand seems to be heavier for plain oak and ash, and these have shown an advance in price, in some cases of as much as two dollars; ash is particularly strong and high in price. Maple, birch, chestnut and poplar are in good demand and prices steady. There is no reason to expect a falling off in prices of hardwoods generally; on the contrary it is predicted that the future will see a steady demand and, if any change in price, the tendency will be upward.

◀ BUFFALO ▶

The hardwood trade is naturally feeling the effects of the holidays and the inventory season, but the outlook is good and a fair amount of lumber has been sold for delivery ahead. The yards look to see this an active year, with the same strength to prices as last year. There are no weak spots among hardwoods and if business keeps up as is hoped for, it would not be surprising to the trade if some advances in prices were made.

Plain oak holds the lead in sales and is maintaining its strong position in both white and red stock. Chestnut and ash are also quite firm. Birch and maple are being called for quite frequently and are strong. Dealers handling beech state that there is a good call for that lumber. All flooring is holding up at a pretty high level of prices.

◀ PHILADELPHIA ▶

It is the general pronouncement of lumbermen that 1912 has proved a satisfactory year in nearly every line of the business. Signs are numerous that 1913 may be looked forward to as a record-breaker. A somewhat subdued activity is always anticipated at this time of the year, but owing to the depleted pile, both at the manufacturing and the consuming ends, a comparatively lively traffic is still going on as every effort is being made to secure stock ahead. The concerted action of the trust companies and extensive operative builders to keep the operation work within limits during the year is already showing good results, as many plans are now under way for large operations to begin as soon as the weather permits.

The relative positions of the hardwoods continue unchanged. Plain red oak, which heads the list both in demand and price, is closely followed by white oak; quartered oak is still advancing; ash is moving up, orders increasing and prices strengthening; chestnut holds a good place; poplar is steady, with increased demand in low grades; maple retains a good position; birch, beech, cherry and basswood are all in good call; cypress shows a little more life; mahogany is growing stronger.

◀ BOSTON ▶

While the demand for hardwood lumber has ruled rather quiet for the past two or three weeks, there has been no abatement in the strength of the market. Practically all reports from producing centers indicate that holders of hardwood lumber are not anxious sellers. Exceptions are reported from time to time where some manufacturer is forced to get ready cash and therefore makes a sale at a slight concession. Such cases, however, are not numerous at the present time.

A good demand is expected for hardwoods as soon as buyers have figured their stock sheets and find out just what they have on hand. Most buyers will be ready to talk buying by the middle of this month, but dealers do not expect a really active demand while the high prices rule. In plain oak there is talk of a still further advance. Quartered oak is also considerably firmer and a fair demand is reported. Maple is in fair call, and whitewood has had a very good demand. The high prices of all hardwoods and the small offerings of good stock has led to much buying of the lower grades to be used as substitutes for the better grades.

◀ BALTIMORE ▶

The new year has begun and the hopes and expectations of the members of the hardwood trade run high. Although the movement of stocks has been restricted in the last two weeks, this did not in any sense imply weakness in the trade, but reflected the sidetracking of attention from ordinary matters by such details as taking stock, the closing of accounts, the striking of balances and the readjustment of office affairs generally. If business has been uneventful, it was not because the demand had eased off or the inquiry lessened, but solely for the reason that there were other things which could not be deferred.

Now that the routine of trade is being taken up again, it is noted that all of the hardwoods are strong, with oak perhaps higher than it has ever been, and both the domestic and the foreign demand of impressive proportions. The predictions of last year that the mills would catch

up with the demand and that prices would decline have not been realized the inquiry being, on the contrary, more active than ever and the outlook most encouraging. The postponement of transactions in the last fortnight must be made up by a correspondingly more urgent request for stocks, and in the absence of extensive accumulations at the mills there is every prospect that the quotations will go still higher. It does not seem to be so much a matter of price now as of ability to fill orders, the mill or wholesaler who has the lumber being the one to get the business. This applies to practically every division of the trade, with perhaps the single exception of extra wide poplar, which remains sluggish and is not responding at all to the activity that prevails in other divisions. As for chestnut, even sound wormy is being taken up with decided freedom and at values which are very satisfactory.

The outlook for the export trade is very promising. Foreign buyers, finding that they cannot buy lumber at the old prices, are inclined to meet the new figures, and in the main the basis of doing business is decidedly acceptable. Stocks are going forward in large quantities and there is every indication of a continuance of the movement. Shippers to foreign countries have learned by experience that there are many pitfalls in the export trade, and there is a general disposition now to conduct business upon a sounder basis than has been the case at different times in the past. Foreign dealers are still coming over to determine for themselves just what there is in the reports of higher quotations and of advanced freight rates, and the interest in supplies is almost acute.

◀ COLUMBUS ▶

Despite the holiday period, which is usually dull in the hardwood trade, business in most lines has been active. Prices are ruling firmer and inclined to advance, and strength is the principal feature of the trade. There is apparently not the usual lull attending upon the semiannual inventories of retailers and manufacturing establishments. Demand has been good from factories and from dealers. The former probably has developed the best demand because of the great expansion in manufacturing during the latter months of 1912. Factories engaged in manufacturing furniture, implements, vehicles and automobiles are perhaps the best buyers in the hardwood field.

Stocks are light in every locality. Mill owners are manufacturing fast in an endeavor to increase stocks but the demand has been insistent and the car shortage is mitigating an accumulation of stocks. Retailers' stocks, as has been the case for some time, are very light. The car shortage is interfering with shipments although some improvement in that direction is reported recently. Collections are good.

Quartered oak is in good demand and advances have been made until firsts and seconds are now selling at the Ohio river at about \$83. Plain oak is also in good demand and recent advances are recorded. Poplar is another variety which has developed considerable strength. The wide sizes are wanted by automobile factories. Chestnut is strong and all grades are higher. Ash is improved and the same is true of basswood. Other hardwoods are unchanged.

◀ CINCINNATI ▶

The hardwood situation is in very good shape, and prospects for a big year are most promising. Dealers view the situation with more confidence than for several years, and unless the unforeseen happens, one of the best years in the hardwood trade is before us. There are a number of reasons for the existence of this optimism. In the first place there is only a very limited supply of dry stocks at this time, and the present demand, except during the holidays, has been quite up to the production. All wood consuming factories in this section are busy and have plenty of business in sight to keep them running for some time to come without new business, and with the country generally prosperous, it is only reasonable to suppose that they will be able to secure considerable new business. This applies to the furniture trade especially, and the planing mills, implement works and the box factories have nice business in sight and are busy at present. Lumber dealers all over the country are having more or less trouble in securing their requirements, and as the season advances will be up against a more serious lumber shortage than existed last year. Manufacturers in the producing field are well supplied with logs, and are putting forth every effort to increase the output. They are well supplied with orders and anticipate plenty of business. Top prices are being asked for every item on the list. Dealers who are forced to place orders at the big mills are up against stiff prices which are none too high when the ever increasing cost of stumpage together with the increases in cost of labor of all kinds is considered. Prices are not too high; they are right and not at all likely to go any lower.

Plain oak is in best demand in years; quartered oak is selling readily, No. 1 common grade being very much sought after. Good grades of poplar seem to be stronger and moving better, while the low grades are very scarce and high in price. Low-grade cottonwood is very hard to find, and the same grade of gum and other hardwoods suitable for box making and packing is in much demand. Thick ash is hard to get and stiff prices are being obtained for this stock by those who have it.

◀ TOLEDO ▶

Owing to the exceedingly heavy drain made upon local lumber yards throughout the season and until the past week, together with the hand-

The Aristocrat of Woods

MAHOGANY

In Veneers and Lumber

¶ There is *mahogany* and *mahogany*. Sundry woods are sold for mahogany that are not mahogany, and much mahogany that is sold is of an inferior quality.

¶ The Willey system of mahogany production involves stationing at every foremost fancy log market in the world a competent buyer, with instructions to purchase *only the largest and best figured wood*, which purchases constitute but a small percentage of the total offered for sale. *Quality is first consideration—price secondary.*

¶ These logs are shipped to the big Willey plant at Chicago, and each of the big sticks is carefully analyzed for surpassing figure, and such as are suitable for high-grade veneers are painstakingly flitched for this purpose.

¶ Of the nearly five thousand mahogany logs handled at the Willey plant during 1912, less than three hundred and fifty were counted of such a quality as to be up to the standard of the Willey veneer product. The remainder were manufactured into lumber.

¶ This system simply means that the Willey mahogany veneer product is *the best that exists*, and that the greater portion of the Willey mahogany lumber is high-class *figured wood*.

¶ The best in figured mahogany veneers or lumber costs the buyer little more than the ordinary product of the average mahogany producer.

¶ Users of mahogany visiting Chicago are earnestly invited to call and inspect the Willey plant and veneer and lumber warehouses on Robey Street, near Blue Island Avenue. Take Blue Island Avenue car at the Postoffice to Robey Street.

C. L. WILLEY, Chicago

Largest Mahogany Veneer and Lumber Producing Plant in the World

FREIGHT OVERCHARGES

WE SPECIALIZE ON LUMBER TRAFFIC

We represent nearly every member of The Mississippi Pine Association

Our overcharge claims for one company, \$6,000.00

Let us analyze your freight accounts
Collect past and prevent future overcharges
Best references from Lumbermen from
Canada to Mexico

COST BASED ON RESULTS

Write for particulars and terms.

The American Freight Audit & Storage Co.

Incorporated

Rooms 55-8, 39 West Adams St.

Chicago

WANTED

All Kinds of High-Grade

HARDWOODS

S. E. SLAYMAKER & CO.

Representing
WEST VIRGINIA SPRUCE LUMBER CO., Fifth Avenue Building,
Cass, West Virginia. NEW YORK

Mutual Fire Insurance

Best Indemnity at Lowest Net Cost
Can Be Obtained From

The Lumber Mutual Fire Insurance Company, Boston, Mass.
The Lumbermen's Mutual Insurance Company, Mansfield, Ohio.
The Pennsylvania Lumbermen's Mutual Fire Insurance Company, Philadelphia, Pa.
The Indiana Lumbermen's Mutual Insurance Company, Indianapolis, Ind.
The Central Manufacturers' Mutual Insurance Company, Van Wert, Ohio

Bluestone Land & Lumber Company

MANUFACTURERS

WEST VIRGINIA HARDWOODS

Soft White Pine, Oak, Poplar, Chestnut, Hemlock

Band Sawed Stock

COMPLETE PLANING
MILL FACILITIES

RIDGWAY
PENNSYLVANIA

THREE STATES LUMBER COMPANY

Manufacturers of

SOUTHERN HARDWOODS

Cottonwood and Red Gum Specialties

MAIN OFFICE, MEMPHIS, TENNESSEE

to-mouth policy pursued by dealers generally, local stocks are badly depleted. Dealers have held back as much as possible because of the extremely stiff prices, hoping that a break would follow. Thus far there is no indication of a break in any line, firmness being evidenced in every department of the lumber trade. Dealers find they must buy at least enough to fill in their depleted stocks and to take care of present needs, which are unusually heavy for this season of the year. There is no inclination to buy as an investment, but liberal orders are being placed for present needs.

The building trades have had a phenomenal run during the past year and the coming season is bound to be an improvement on the past owing to the enormous amount of building for which plans are now being drawn and contracts let. The furniture factories are running well and vehicle factories are also calling for a good run of material. Taken altogether, dealers are finding nothing to complain about except the car shortage and that has eased up some in the past two or three weeks. Should the present bad weather continue there is likely to be congestion; but in that case the lumberman's needs will not be so pressing.

INDIANAPOLIS

Hardwood men of this vicinity believe that the outlook for an excellent business during 1913 is very encouraging. While the present volume of trade is not above normal, considering the season, it is quite satisfactory. Most of the hardwood and veneer mills as well as the wholesalers are busy.

There is very little complaint of car shortage at this time. General reports are that the best demand now is for all grades of oak and poplar. Prices are steady and show no signs of a break in the near future. Shipments are moving with some degree of promptness. Retailers are showing a little more disposition to replenish their yards than they did a few weeks ago.

MEMPHIS

Bank clearings in Memphis during 1912 broke all previous records with a total of about \$420,000,000 as against \$360,000,000 for 1911. The gain per month was approximately \$5,000,000. The lumbermen made their contribution to this excellent showing, as they did considerably more business in 1912 than during any year since 1907. They not only did a large business but the amount of money involved was much heavier owing to the fact that prices were higher.

Most of the lumber firms here have been busy during the past few days taking inventories and getting things in readiness for the new year. While it is impossible to go into details or to tell the exact earnings of any particular firm, it may be said in a general way that the past year was a prosperous period for the lumbermen. They had some very serious handicaps with which to contend, including the flood in the Mississippi and the shortage of cars which tied them up several times. They have also had to contend with advances in freight rates and with discontinuance of through bills of lading on export shipments on the part of the roads west of the Mississippi river. They have met these conditions, however, and have enjoyed greater prosperity than for a long while.

The feeling at the beginning of the new year is one of confidence. It is anticipated that there will be a continuance of the good demand recently in evidence and it is further felt that prices will be well maintained. The car situation is considerably easier now than for several months and this means that it will be possible to move both lumber and logs with greater freedom. Export business looks particularly good. Many orders from Europe have been booked recently and there is a large amount of hardwood lumber to be forwarded to foreign ports as fast as it can be moved under present somewhat unsatisfactory conditions. Reference is had particularly to the withdrawal of through bills of lading and to the consequent necessity on the part of exporters west of the Mississippi river to ship their lumber to the ports on local bills. There is not a large amount of dry stock available at the moment and this is perhaps the one feature which will go further than any other toward restricting the volume of business. On the other hand, it is regarded as a favorable factor in the respect that it will enable owners of lumber to secure full prices.

NASHVILLE

The local hardwood manufacturers and dealers enjoyed a prosperous year in 1912—one of the very best in their history. They had practically all the business they could handle. Even the holiday trade interfered but little with their rush. Now that the holidays are over and the first of the year has come and gone, most companies are busy with their annual inventories, but even with this inquiries are steadily coming in, the year starting off in a way which conclusively indicates prosperous times during the coming twelve months.

The general tone of the market is firm. The demands for oak, ash and other lines have been so heavy that somewhat depleted stocks were insufficient to meet them and the customary stocks, estimated to average here about 100,000,000 feet, are estimated to be fully twenty per cent below normal. During the past year prices on some grades of hardwoods advanced several dollars per thousand feet. In 1912 the building permits exceeded any previous year and 1913 promises still better results. Railroad demands are still very active and the same is true of calls from

ear companies. Box manufacturers and planing mills were busy right up to Christmas, the former being especially after lower grades of oak and wood. Plain and quartered oak leads in present demands and nearly all grades of oak are in good call with light stocks. There is a good demand for red gum in nearly every grade except firsts and seconds. Low grade poplar is selling well and there is improvement in the better grades. Hardwood flooring is active and prices stiff. The logging season is opening and some good shipments have been received locally from the upper Cumberland river.

◀ BRISTOL ▶

Lumbermen here report trade brisk and splendid prospects for the year. Prices continue stiff, and it is believed that if the present scarcity of stocks continues, prices will be considerably higher before many months. Many lumber concerns here are looking about for more timber to increase their output. Several large new mills are now being installed and will soon be in operation.

◀ LOUISVILLE ▶

As soon as could have been expected after the opening of the new year, the demand for lumber made its appearance in normal strength. During the latter part of December trade fell off considerably, as far as new orders were concerned, but in view of the fact that both lumbermen and their customers were making annual inventories this didn't matter much. Business was kept up by the shipments on old orders, and as trade had been brisk prior to that time, there was no lack of work for the yard crews. In fact, by dint of getting out a lot of lumber on orders already booked, some companies made December the largest in their history, while November, with normal conditions prevailing as to shipments, was the best ever for some concerns. January has done exceptionally well thus far, and seems likely to hold up the excellent run of business which has been enjoyed for the past five or six months. Plain oak, quartered oak, ash, hickory, cottonwood and gum are all in good demand. Poplar has improved noticeably of late. Prices are steady to firm, and there is not likely to be any material change unless it should be seen that demand is running ahead of production, in which event still further increases are likely to be brought about.

◀ ST. LOUIS ▶

Hardwood conditions continue along the same lines as they have for some time. During the past few days business has been quiet, owing to the holiday season and stock-taking time, but it is seasonable with all that and was expected. Salesmen of the various yards have been home for the holiday season but intend to return to their territories within the next few days. Those interviewed while in the city stated conditions in the sections they cover are most favorable for a good spring business. They stated that oak and ash are having a good sale at stiff prices. Poplar is not selling as well as it did. Gum and cottonwood, however, are steady sellers. Cypress is selling pretty well, and a good business is looked for in the early spring. Yards making a specialty of cypress are well pleased with the outlook and anticipate a good demand within the near future. The sash and door factories have had a good season before them. On the whole, the outlook is excellent for a most satisfactory spring trade.

◀ MILWAUKEE ▶

The local hardwood trade is beginning to fall off somewhat, owing to the fact that many manufacturing concerns are now in the midst of their annual inventories. The decrease in demand is nothing as compared with what is usually experienced at this season of the year. Just as soon as the inventory work is out of the way the local sash and door plants and other manufacturing concerns will be operating full time and will want plenty of lumber. Stocks at all of these plants are low.

Reports from the northern mills indicate that a brisk demand for lumber is being experienced, but that buyers are finding difficulty in having their orders filled. The scarcity of upper grades has resulted in a better call for common grades, especially in maple, birch and basswood. There is little prospect of securing new lumber in shipping condition for five or six months, and the situation is regarded as serious by many jobbers and manufacturers, considering the scarcity of all dry stocks.

Plain and quartered oak is strong and prices are somewhat higher. Hard maple is selling well and reports from the mills are to the effect that some good contracts have been placed in this line.

◀ DETROIT ▶

The opening of the new year finds the Detroit hardwood market in very good condition. Dealers and manufacturers report a big volume of orders and inquiries. Many dealers are running low on stocks because of delayed freight shipments, due to the embargo which has been in effect at Toledo. Elm, birch and maple have been in steady demand. Oak, especially the two-inch size, is very scarce and the price is steadily mounting. A further increase in prices all along the line is predicted by many dealers. The flooring, veneer and box trades are all very busy, the flooring manufacturers being especially pleased with existing business conditions. Hardwood men are unanimous in their prediction of big business during the spring and summer of 1913.

TIMBER TALKS

Thirty-two years have wrought wonderful changes in values, sources of supply and national regard for timber.

Thirty-two years ago we advised our clients to buy timber; twenty-two years ago the same advice was given; twelve years ago it was reiterated; two years ago we restated our belief in the continued increase in the price of timber and today we reaffirm it.

Acting upon the POINTERS we gave, at the time they were given, hundreds of investors have reaped rich profits.

Knowing timber to be a safe investment and believing our organization to be of value to those contemplating the purchase of timber, we have issued

A BOOK OF POINTERS

in which we have endeavored to crystallize the observations of thirty-two years' timber research.

It was worth our while to formulate "pointers"; it should be worth your while to assimilate them.

JAMES D. LACEY & CO.

Timber Land Factors

Chicago, 1215 Old Colony Bldg. Portland, 1104 Spalding Bldg. Seattle, 1009 White Bldg.

James D. Lacey & Co.

1215 Old Colony Building, Chicago, Ill.

Gentlemen: Please send copy of Pointers to

Name.....

Street or Office.....

City..... State.....

Clip above form and mail today

Form H.

FOR QUICK SALE

Tank and Seat Factory

Plant, Real Estate, Power,
Heating Blower, Lighting
and Machine Equipment

For Sale or Lease

Inventories \$45,000

Built in 1911. Contains Dry Kiln,
Wood Shop, Shipping and Assem-
bling Room, Varnishing Room,
Stock Room, Boiler and Engine
Room. Lowest insurance rate.
900x1200 sq. ft. of land.

Write for Descriptive Circular and information

Location—Address

Pillsbury & Baldwin Co.

St. Johnsbury, Vt.

THIS IS OUR RECORD

In Business	- - - - -	7 $\frac{3}{4}$ Years
Losses Paid	- - - - -	\$1,100,000
Savings Effected for Subscribers	- - -	700,000
Quick Assets Belonging to Subscribers	-	775,000

More Cash Assets to each \$100 of Outstanding Liability than the Largest Stock Companies

Entire Interest Earnings Paid to Subscribers

Experience has demonstrated that from one-third to one-half of the cost of their insurance can be saved to the LUMBERMEN by carrying ALLIANCE POLICIES. Give us the opportunity to make these substantial savings for YOU.

Lumbermen's Underwriting Alliance

U. S. EPPERSON & COMPANY, ATTY. & MGR.

R. A. Long Bldg.

Kansas City, Mo.

Advertisers' Directory

NORTHERN HARDWOODS.

American Lumber & Mfg. Co.....	15
Beecher & Barr.....	14
Buffalo Hardwood Lumber Co.....	67
Coale, Thos. E., Lumber Company..	14
Cobbs & Mitchell, Inc.....	3
Craig, W. P., Lumber Co.....	14
Curl, Daniel B.....	53
Darling, Chas. & Co.....	53
East Jordan Lumber Company.....	59
Elias, G., & Bro.....	67
Estabrook-Skeele Lumber Co.....	5
Flanner-Steger Land & Lumber Co.	4
Forman, Thos., Company.....	59
Goodyear, C. A., Lumber Co.....	66
Hadentine Lumber Company, Inc...	62
Hanson-Turner Company.....	13
Heyser, W. E., Lumber Co.....	15
Holyoke, Chas.....	2
Holloway Hardwood Lumber Co.....	15
Jones Hardwood Company.....	14
Kent, J. S., Company.....	53
Klann, E. H.....	3
Kneeland-Bigelow Company, The....	14
Litchfield, William E.....	2
McIlvain, J. Gibson, & Co.....	67
McLean, Hugh, Lumber Co.....	53
McParland Hardwood Lumber Co....	67
Miller, Anthony.....	3
Mitchell Bros. Company.....	13
Mowbray & Robinson.....	66
Oelhafen Lumber Company.....	53
Osgood & Richardson.....	14
Palmer & Parker Co.....	66
Sawyer-Goodman Company.....	4
Schultz, Holloway Co.....	53
Smith, Fred D.....	67
Standard Hardwood Lumber Co.....	9
Stearns Salt & Lumber Company...	59
Stephenson, I., Company, The.....	67
Stewart, I. N., & Bro.....	64
Stimson, J. V., & Co.....	67
Sullivan, T. & Co.....	66
Tegge Lumber Co.....	59
Vinke, J. & J.....	15
VonPlaten Lumber Co.....	68
Webster, George, Lumber Company.	14
White, Wm. H., Co.....	14
Wiggin, H. D.....	16
Williams, Ichabod T., & Sons.....	14
Willson Bros. Lumber Company.....	14
Wistar, Underhill & Nixon.....	15
Wood-Mosaic Company.....	67
Yeager, Orson E.....	3
Young, W. D., & Co.....	6

SOUTHERN HARDWOODS.

American Lumber & Mfg. Co.....	15
Anderson-Tully Company.....	9
Atlantic Lumber Company.....	65
Baker-Matthews Mfg. Co.....	13
Bennett & Witte.....	48
Bluestone Land & Lumber Co.....	64
Boice Lumber Company.....	11
Booker-Cecil Company.....	67
Brown, W. P., & Sons Lumber Co...	16
Buffalo Hardwood Lumber Co.....	7
Carrier Lumber & Mfg. Co.....	14
Cherokee Lumber Co.....	14
Coale, Thos. E., Lumber Company...	53
Curl, Daniel B.....	61
Darling, Chas. E. & Co.....	13
Davis, Edward L., Lumber Company	67
Dempsey, W. W.....	5
Duhlmeier Brothers.....	13
Elias, G., & Bro.....	13
Estabrook-Skeele Lumber Co.....	16
Farrin, M. B., Lumber Company.....	16
Faust Bros. Lumber Co.....	4
Flanner-Steger Land & Lumber Co.	65
Garetson-Greaseon Lumber Co.....	64
Hadentine Lumber Company, Inc...	64
Hamilton, J. V.....	13
Heyser, W. E., Lumber Company...	65
Hill Brothers Tie & Lumber Co....	64
Himmelberger-Harrison Lumber Co.	2
Hitt, H. H., Lumber Company.....	5
Holloway Hardwood Lumber Co.....	14
Huddleston-Marsh Lumber Co.....	10
Kent, J. S., Company.....	14
Kentucky Lumber Co.....	10
Keys-Walker Lumber Co.....	6
Kimball & Kopcke.....	53
Klann, E. H.....	8
Lamb-Fish Lumber Co.....	18
Litchfield, William E.....	64
Little River Lumber Company.....	6
Logan, J. M., Lumber Co.....	64
Louisiana Long Leaf Lumber Co....	11
Louisville Point Lumber Company...	7
Love, Boyd & Co.....	13
Maley, Thompson & Moffett Co.....	6
Maphet & Shea Lumber Company...	2
McIlvain, J. Gibson, & Co.....	67
McLean, Hugh, Lumber Co.....	53
McParland Hardwood Lumber Co....	67
Miller, Anthony.....	13
Mowbray & Robinson.....	11
Norman Lumber Company.....	11
Ohio River Saw Mill Company.....	53
Osgood & Richardson.....	8
Paepoke-Leicht Lumber Company..	13
Radina, L. W., & Co.....	7
Ransom, J. B., & Co.....	16
Russe & Burgess, Inc.....	65
Salt Lick Lumber Company.....	4
Schultz, Holloway Co.....	48
Slaymaker, S. E., & Co.....	53
Smith, Fred D.....	6

Standard Hardwood Lumber Co.....	67
Stewart, I. N., & Bro.....	67
Stimson, J. V., & Co.....	64
Sullivan, T. & Co.....	67
Tennessee Hardwood Lumber Co....	7
Three States Lumber Company.....	48
Vestal Lumber & Manufacturing Co.	6
Vinke, J. & J.....	59
VonPlaten Lumber Co.....	15
Webster, George, Lumber Company.	10
West Virginia Timber Company....	65
Whiting, Wm. S.....	14
Whitmer, Wm., & Sons.....	14
Wiggin, H. D.....	14
Williams, Ichabod T., & Sons.....	16
Willson Bros. Lumber Company.....	14
Wistar, Underhill & Nixon.....	14
Wood-Mosaic Company.....	15
Wood, R. E., Lumber Company.....	67
Yeager, Orson E.....	3

POPLAR.

Anderson-Tully Company.....	9
Atlantic Lumber Company.....	13
Farrin, M. B., Lumber Company.....	16
Faust Bros. Lumber Company.....	10
Hadentine Lumber Company, Inc...	6
Kentucky Lumber Company.....	6
Keys-Walker Lumber Company.....	13
Logan, J. M., Lumber Co.....	68
Maphet & Shea Lumber Company...	10
Radina, L. W., & Co.....	65
Vansant, Kitchen & Co.....	15
West Virginia Timber Company....	68
Whiting, Wm. S.....	68
Wood, R. E., Lumber Company.....	68
Yellow Poplar Lumber Company....	61

VENEERS AND PANELS.

Adams & Raymond Veneer Co.....	61
Ahnapee Veneer & Seating Co.....	62
Astoria Veneer Mills & Dock Co...	63
Central Veneer Company.....	60
Gorham Brothers Company.....	61
Hanson-Turner Company.....	60
Hoffman Bros. Company.....	60
Huddleston-Marsh Lumber Co.....	5
Jarrell, B. C., & Co.....	60
Kentucky Veneer Works.....	60
Kiel Wooden Ware Company.....	62
Knoxville Veneer Company.....	6
Louisville Veneer Mills.....	11
Maley, Thompson & Moffett Co....	13
Mengel, C. C., & Bro. Company.....	61
Ohio Veneer Company.....	60
Penrod Walnut & Veneer Co.....	60
Putnam Veneer and Lumber Co....	63
Rayner, J.....	5
Rice Veneer & Lumber Company...	60
Southern Veneer Manufacturing Company.....	63
Underwood Veneer Company.....	63
Veneer Manufacturers' Company...	53
Walker Veneer & Panel Co.....	47
Wiley, C. L.....	16
Williams, Ichabod T., & Sons.....	62
Wisconsin Seating Company.....	15
Wood-Mosaic Company.....	63

MAHOGANY, WALNUT, ETC.

Astoria Veneer Mills & Dock Co....	63
Duhlmeier Brothers.....	13
Hamilton, J. V.....	64
Huddleston-Marsh Lumber Co.....	5
Maley, Thompson & Moffett Co....	13
Mengel, C. C., & Bro. Company...	11
Palmer & Parker Co.....	14

Penrod Walnut & Veneer Co.....	60
Purcell, Frank.....	65
Rayner, J.....	5
Struthers Cooperage Company.....	47
Wiley, C. L.....	16
Williams, Ichabod T., & Sons.....	16

HARDWOOD FLOORING.

Beecher & Barr.....	14
Carrier Lumber & Mfg. Co.....	16
Cobbs & Mitchell, Inc.....	3
Eastman, S. L., Flooring Co.....	59
Farrin, M. B., Lumber Company...	13
Forman, Thos., Company.....	59
Kerry & Hanson Flooring Co.....	59
Louisiana Long Leaf Lumber Co....	64
Mitchell Bros. Company.....	3
Robbins Lumber Co.....	66
Salt Lick Lumber Company.....	65
Stearns Salt & Lumber Company...	9
Stephenson, I., Company, The.....	59
Webster Lumber Co., George.....	15
White, Wm. H., Co.....	68
Wilce, T., Company, The.....	5
Young, W. D., & Co.....	3

WOODWORKING MACHINERY.

Cadillac Machine Co.....	58
Linderman Machine Co., The.....	10
Mershon, W. B., & Co.....	6
Phoenix Manufacturing Co.....	13
Saranac Machine Company.....	55
Steinmetz, C. M.....	15
Westinghouse Electric & Mfg. Co..	55

LOGGING MACHINERY.

Baldwin Locomotive Wks.....	55
Clyde Iron Works.....	58
Lidgerwood Mfg. Co.....	58
Russel Wheel & Foundry Co.....	57

DRY KILNS AND BLOWERS.

Grand Rapids Veneer Works.....	58
Phila. Textile Mch. Co.....	15

SAWS, KNIVES AND SUPPLIES.

Atkins, E. C., & Co.....	56
Simonds Mfg. Co.....	5

LUMBER INSURANCE.

Central Manufacturers' Mut. Ins. Co.	48
Epperson, U. S.....	50
Indiana Lumbermen's Mut. Ins. Co.	48
Lumber Mutual Fire Insurance Co..	48
Lumbermen's Mutual Ins. Co.....	48
Lumbermen's Underwriting Alliance	50
Lumber Underwriters.....	16
Pennsylvania Lumbermen's Mutual Fire Ins. Co.....	48
Rankin, Harry & Co.....	60

TIMBER LANDS.

Lacey, James D., & Co.....	49
Spry, John C.....	5

MISCELLANEOUS.

American Freight Audit & Storage Company.....	48
Astoria Veneer Mills & Dock Co....	63
Childs, S. D., & Co.....	53
Gerlach, The Peter, Company.....	53
Lumbermen's Credit Association....	5
Mechanical Rubber Company.....	2
Pillsbury & Baldwin Company.....	49
Struthers Cooperage Company.....	53
Tamm's Silica Company.....	53
Wausau Advancement Association..	11
Westinghouse Electric & Mfg. Co...	5

CLASSIFIED ADVERTISEMENTS

Advertisements will be inserted in this section at the following rates:

For one insertion.....20c a line
For two insertions.....35c a line
For three insertions.....50c a line
For four insertions.....60c a line

Eight words of ordinary length make one line.
Heading counts as two lines.
No display except the headings can be admitted.

Remittances to accompany the order. No extra charges for copies of paper containing the advertisement.

EMPLOYES WANTED

WANTED

Good walnut log bower.

C. J. FRANK, Logansport, Ind.

EMPLOYMENT WANTED

WANTED—EMPLOYMENT

When you want a salesman for New York state territory, write us. We can supply you with a good man. EMPIRE STATE ASSOCIATION of Wholesale Lumber & Sash & Door Salesmen. Chas. Johnson, Sec'y, 96 Kirkland Rd., Rochester, N. Y.

TIMBER ESTIMATING

TIMBER ESTIMATES

Estimating Southern timber a specialty. Maps, detailed reports as to stand, quality and logging conditions. Have a few high-class properties for sale. Can furnish best references.

THOS. J. McDONALD,
East Tenn. Natl. Bank Bldg.,
Knoxville, Tenn.

WAGON STOCK WANTED

I AM IN THE MARKET FOR

75 to 100 cars of oak poles, bolsters, sand boards, eveners, and reaches; and hickory and maple axles. Will inspect at shipping point, and pay cash.

E. B. BROWN, 372 Bayne St.,
Buffalo, N. Y.

LOGS WANTED

WANTED—BLACK WALNUT LOGS

500 cars good black walnut logs, 10" and up in diameter, 6 ft. and up long. Will inspect at shipping point and pay cash.

GEO. W. HARTZELL, Dayton, Ohio.

WANTED—HARDWOOD LOGS

200,000 ft. 28" and up White Oak logs.

200,000 ft. 12" and up Walnut logs.

50,000 ft. 12" and up Cherry logs.

C. L. WILLEY, 2558 S. Robey St., Chicago.

TIMBER LANDS FOR SALE

FOR SALE—7500 ACRES

Of virgin hardwood timber estimated to contain 32,680,000 ft. right on the railroad. Price very low. Address, F. G. HOFFMANN, Beta, N. C.

FOR SALE

About 3,000 acres of virgin oak timber, 4 miles from railroad, southeast Missouri.

T. A. SMITH, Manchester, Mo.

FOR SALE

700 acres of well timbered land, consisting chiefly of Southern poplar, hickory and other hardwoods, near Manchester, Tenn. Land is underlaid with coal. Will sell timber only, or timber and land together. K. McKENZIE, Owner, 619 Andrus Bldg., Minneapolis, Minn.

FOR SALE CHEAP

to close an estate, several thousand acres of hemlock and hardwood timber in Northern Wisconsin. Large or small tracts. N. EMERSON, 701 Metropolitan Life Bldg., Minneapolis, Minn.

ARE YOU INTERESTED IN GUM

and Red Oak?

I own in fee simple two small and carefully selected tracks of high-class gum and red oak stumpage. Will sell at price to make the buyer good money either as an investment or as an operating proposition.

Will deal with principals only. Address in confidence, "BOX 22," care HARDWOOD RECORD.

TIMBER LANDS WANTED

WANTED TO BUY

400 or 500 acres of good hardwood timberland, mostly oak and ash, suitable for bending purposes. Address

"BOX 125," care HARDWOOD RECORD.

TIMBER FOR SALE

FOR SALE—HARDWOOD TIMBER

6,118 acres in fee simple of virgin timber land having on it the following: Oak, 15 million feet; cypress, 12 million feet; gum, 12 million feet; pine, 10 million feet. This is located in North Louisiana and is fine timber. Address

"OWNER," care HARDWOOD RECORD.

LUMBER FOR SALE

OAK, POPLAR, ASH

and all other hardwoods, in all grades and thicknesses, can be readily sold if advertised in the Wanted and For Sale section of HARDWOOD RECORD. If you have a large stock you want to sell try a few lines in this department and see what a lot of inquiries they will bring you.

FOR SALE

Car Curly Poplar, largely 4/4.

2 cars 4/4 No. 1 Common Poplar

3 cars 8/4 No. 2 Common Poplar

Address P. O. BOX 174, Hickory, N. C.

DIMENSION STOCK WANTED

WANTED

DIMENSION OAK

Plain and Quartered

Various sizes for chair and table factories.

Send to us for specifications and prices.

INDIANA QUARTERED OAK CO.

7 East 42nd Street,

New York.

LUMBER WANTED

WE SHOULD LIKE TO HEAR FROM

Any firms in a position to supply Poplar Electric Casings, and also from those in a position to supply Red Gum Veneers.

Address "BOX 122," care HARDWOOD RECORD.

WANTED AT ONCE

1 carload No. 1 Chestnut Poles 30' long, 7" diameter at top.

WERB WOODFILL, Greensburg, Indiana.

THE GOSHEN MFG. CO.,

Goshen, Ind., is in the market for a quantity of Dimension Beech lumber.

WANTED

One-inch kiln-dried Oak and Chestnut.

DECATUR COFFIN CO. Decatur, Ill.

BUYERS OF HARDWOODS.

Do you want to get in touch with the best buyers of hardwood lumber? We have a list, showing the annual requirements in lumber, dimension stock and veneers and panels of consumers of those materials throughout the United States and Canada. The service is free to advertisers in the RECORD. It will interest you. Write us for further information about our "Selling Lumber by Mail System."

HARDWOOD RECORD, Ellsworth Bldg.,
Chicago.

BUSINESS OPPORTUNITIES

FOR SALE

Plant, real estate, power, blower, heating, lighting and machinery equipment of the Pillsbury & Baldwin Co., manufacturers of tanks and seats. New factory building with 22,000 square feet floor space, Andrews dry kiln. Two railroad sidings, in the heart of the native timberlands, every detail up to the minute. Write for descriptive circular, terms, etc.

PILLSBURY & BALDWIN CO., St. Johnsbury, Vt.

OVER 100 FAMILIES

Living in tents around Henryetta, Oklahoma. Not a vacant room or building in the district. The Henryetta Development Co. offers inducements and guarantees to the man or men who will erect 100 three, four and five room houses. Address E. B. MILLER, Sec'y, Henryetta Development Co., Henryetta, Oklahoma.

EXPORT

Well-known export firm, thoroughly acquainted with the European markets, would like to get into connections with first-class mills, especially in West Virginia, with the object of handling their stock for export. Principal will spend most time in Europe. Can furnish A1 references. Address "BOX 123," care HARDWOOD RECORD.

EXCELLENT OPPORTUNITY

for man to go in manufacturing business. Have well-equipped hardwood factory suitable for making spokes and vehicle stock. Healthy location in town six thousand, on two rivers and two railroads. Address

"BOX 72," care HARDWOOD RECORD.

PARTNERSHIP INTEREST FOR SALE

Non-resident partner in Hardwood Manufacturing company will dispose of controlling interest.

Address "BOX 120," care HARDWOOD RECORD.

WANTED

To correspond with a reliable and competent manufacturer of hardwood lumber, who has a mill and wants a location in the Gulf states. Address ROBINSON LUMBER CO., 717 Whitney Bank Bldg., New Orleans, La.

MACHINERY FOR SALE

FOR SALE

One 80 H. P. high pressure boiler; one 60 H. P. side crank engine, both Houston, Stanwood & Gamble make with all connections complete; Gordon Hollow Blast grates, blower, Worthington duplex pump, Marsh steam head, Bissell dynamo. All new, out of factories 18 months only.

Also one American No. 2 self-feed ripper. One three-saw tower edger, one 30" Bucyrus exhaust fan. One Sinker-Davis double circular mill, new.

For information write to

BOX 188, Gillett, Ark.

FOR SALE CHEAP

One No. 88 new Berlin matcher. Inquire of GEO. E. SPRY, 1003 Harris Tr. Bldg., Chicago.

FOR SALE

3 hydraulic veneer presses; five pumps, 2 and 3 plunger; 12 pumps, single; 190 retainers; 1 glue roll. All well-known makes. Cheap.

CHAS. F. ELMES ENGINEERING WORKS,

228 N. Morgan St., Chicago.

Gerlach Modern Machines

COOPERAGE STOCK and BOX SHOOKS

Circular, Band and Cylinder Saws
SAW AND LOG TOOLS

THE PETER GERLACH CO., Cleveland, 6th City, U.S.A.

CHICAGO

Osgood & Richardson
935 Peoples Gas Bldg.

NORTHERN AND SOUTHERN
HARDWOODS

Chicago Agents: LAMB-FISH LUMBER CO.

Telephone Canal 1688

CHAS. DARLING & CO.
HARDWOOD LUMBER
22nd Street and Center Avenue
CHICAGO

McParland Hardwood
Lumber Co. 2204 S. Laflin St.
HARDWOODS

FRED D. SMITH
HARDWOOD LUMBER
1337-1343 North Branch St. CHICAGO

E. H. KLANN
Cottonwood, Gum, Oak, Ash, Cypress, Yellow Pine, Dimension Stock

819 FISHER BLDG.

HAR. 1187



A Veneer Gauge is the answer to a Veneer User's craving for years. This "Walker Brand" Veneer Gauge is a steel gauge that will satisfy your wants for all time. You can't do yourself a better turn than to buy one of these gauges. It gauges ACCURATELY every thickness from 1/40 inch to 1/2 inch INCLUSIVE. Wake up to this opportunity. Price only \$1.98 delivered by U. S. Mail. Order now, today. Address—6456 Woodlawn Ave. Phone Hyde Park 88.

WALKER EYE
CHICAGO

99% PURE
SILICA
OR SILEX FOR WOOD FILLERS
TAMMS SILICA CO., 19 So. 5th Ave., Chicago

COUNTERFEIT CHECKS

are frequent
except where
our

Two Piece
Geometrical
Barter Coin
is in use, then
imitation isn't
possible.
Sample if you
ask for it.

S. D. CHILDS
& CO.
Chicago

We also make
Time Checks,
Stencil and
Log Hammers.

GIBSON
TALLY BOOK

This three-throw tally ticket cover is made from aluminum, and accommodates four tally tickets—4x8 1/2 inches in size.

Folds compactly to less than one-fourth inch in thickness and fits side or inside coat pocket.

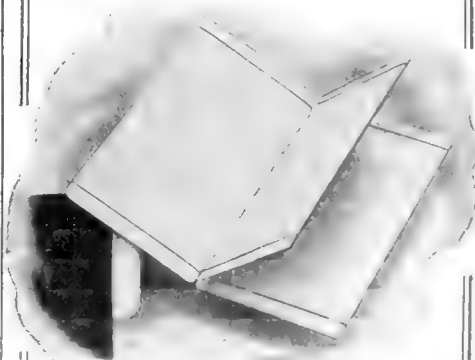
Gives large area of four tickets for complicated tallies, or straight grade can be made on one page.

Accommodates any form of tally ticket desired.

Special, patented, triplicate tally tickets supplied, printed on waterproof paper with carbon backs. Tallies made on these tickets are unalterable. Their use enables the inspector to retain triplicate, and forward original and duplicate. Duplicate designed to be attached to invoice.

These tally books are perfection for durability, convenience, accuracy, and for systematizing the inspection and measurement of lumber.

Patent applied for on covers. Copyrighted, 1910. Triplicate Tally Tickets patented.



PRICE LIST

Aluminum Tally Covers, each	\$ 1.00
Aluminum Tally Covers, per dozen	10.00
Patented triplicate Tally Tickets (stock form)	per 1,000 10.00
Single sheet Manila (stock form) Tally Tickets,	per 1,000 4.00

Specimen forms of Tally Tickets mailed on application. Covers sold on approval to responsible concerns.

Manufactured by

Hardwood Record
537 S. Dearborn St., CHICAGO

11

CAIRO, ILL.

This tally is made on..... tickets of which this is No.....

Of Single Duplicate or Tripli-
cate Lumber Tally Ticket
(without Loose Carbon Sheets)
used in the

Gibson Aluminum Tally Book Covers

MANUFACTURED BY

HARDWOOD RECORD

537 S. Dearborn Street

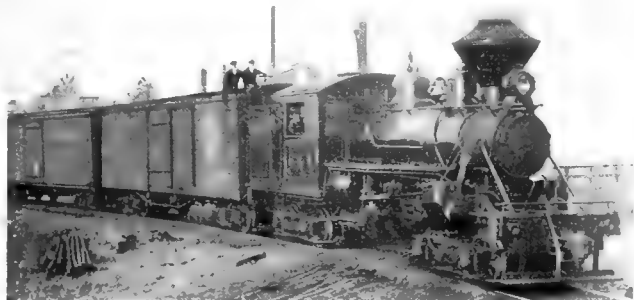
CHICAGO

Let us send you catalogue and price list of scores of forms of lumber, flooring and log tally tickets.

The Gibson Tally Book System
has more than 2,500 users.

Baldwin Geared Locomotive

Logging Locomotives must operate on steep grades, sharp curves and uneven tracks. This is what the geared locomotive illustrated has been designed to do. It is symmetrical in construction, and power is transmitted to the axles through a central drive. The valve motion is simple and accessible, and all new features have been tried out in service.



This locomotive is well-designed, well-built and fully guaranteed. Various sizes can be furnished, to suit different track and operating conditions.

THE BALDWIN LOCOMOTIVE WORKS
PHILADELPHIA, PA., U. S. A.

Cable Address:—"Baldwin, Philadelphia"

Branch Offices:

New York, N. Y., Hudson Terminal; St. Louis, Mo., Wright Building;
Chicago, Ill., Railway Exchange; Portland, Ore., Spalding Building;
Richmond, Va., Travelers Building.



Saws Driven by Westinghouse Motors.

Westinghouse Motors Save 53% of Power in a Woodworking Plant

TESTS in a woodworking plant showed that it required 180 h. p. to drive all the machines from line shafts, but that only 85 h. p. was needed when each machine was driven by a Westinghouse motor.

95 h. p. was therefore wasted in friction by the line shafts and belts, and represented a continuous loss even if only one machine was in use.

But saving in power is only one of the advantages gained by the use of the Westinghouse motors. Some of the others are:

Machines can be placed wherever desired so that materials can be passed from one process to the next with the least handling.

Belt and line shaft maintenance expense greatly reduced.

Trouble with one machine does not necessitate shutting down others.

Cleaner and safer working conditions.

Minimum fire risk and insurance charges.

These advantages mean greater production at less cost.

These advantages can be obtained in any woodworking plant with properly applied Westinghouse motors.

Westinghouse representatives will, on request, investigate your plant and recommend the proper motors to secure the most satisfactory and economical drive.

Westinghouse Electric & Mfg. Co.
East Pittsburgh, Pa.

Sales Offices in 45 American Cities



Corrugated Joint Fasteners

Can be quickly and cheaply driven with

**"ADVANCE"
CORRUGATED
JOINT FASTENER
MACHINE**

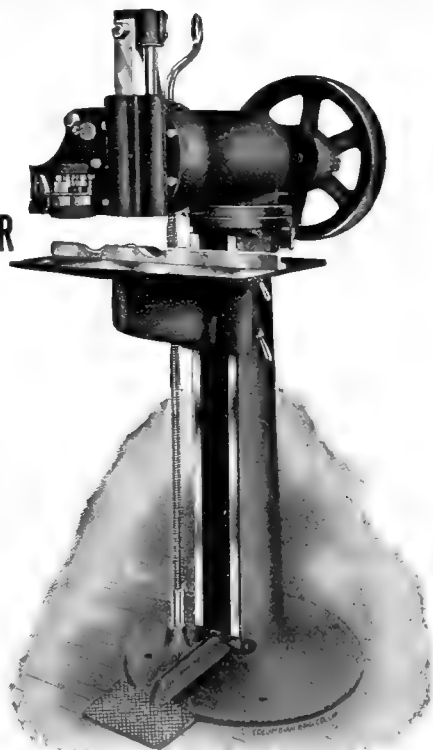
Made in Different
Types to Meet
All Conditions

Specially suitable for
manufacturers of
sash, doors, blinds,
screens, coffins,
furniture, plumbers'
wood-work, porch
columns, boxes,
refrigerators, etc.

Write for bulletins
and prices.

Manufactured only
by

Saranac Machine Co., St. Joseph, Michigan



SILVER STEEL SAWS

No matter what you have been using before, or how well you think you're satisfied, make a change and use Saws made from ATKINS SILVER STEEL and you will be better satisfied than ever.

Better in quality than any other saw steel. Far superior in results to the millman. We are pioneers in all improvements in Saws of all kinds.

BAND SAWS

CIRCULAR SAWS

CROSS-CUT SAWS

GANG and RESAWS

A Perfect Saw for Every Purpose

ATKINS MACHINE KNIVES—"FINEST ON EARTH."
AGENTS FOR COVEL FILING ROOM MACHINERY.

Full information and price on request by writing to any of our branch houses or agents.

E. C. ATKINS & CO., Inc.

The Silver Steel Saw People

Home Office and Factory, Indianapolis, Ind.

BRANCHES: Atlanta, Chicago, Memphis, Minneapolis, New Orleans, New York City,
Portland, San Francisco, Seattle, Vancouver, B. C. Sydney, N. S. W.
CANADIAN FACTORY: Hamilton, Ont. MACHINE KNIFE FACTORY: Lancaster, N. Y.



THE RUSSEL COMBINED SKIDDER AND LOADER IN OPERATION

Russel Logging Cars are built to stand severe service, of any capacity desired or to suit any length of log.

Logging Economy will interest you

The most convincing proof of any machine's efficiency, next to a personal trial, is the expression of those who have used them.

We shall be pleased to furnish you with the proofs or the names of the operators who will be glad to show you the machines in operation.

The Russel Combined Skidder and Loader has demonstrated itself to be superior in design and construction. The great decrease in cost and increased efficiency of logging is bound to appeal to the operators.

Russel Wheel & Foundry Co., Detroit, Mich.

A Prominent Veneer Man says:

“I believe your new service showing the exact requirements of the Veneer and Panel Trade to be highly accurate, and a necessary part of the office equipment of any progressive veneer or panel factory.”

The same information would cost you thousands of dollars. The cost of our service is a small fraction of that.

Ask your competitor to tell you how it has helped him, and then write us for details.

HARDWOOD RECORD,

CHICAGO, ILL.

"CLYDE- GRADE Than which there is None better."

Nearly a thousand lumber companies have proved the economy and efficiency of skidding with the Clyde Skidder and loading with the McGiffert Log Loader. If you are not one of them you will be after you give us a chance to show you; and meantime it's costing you somewhere around \$25 a day to "do without!"

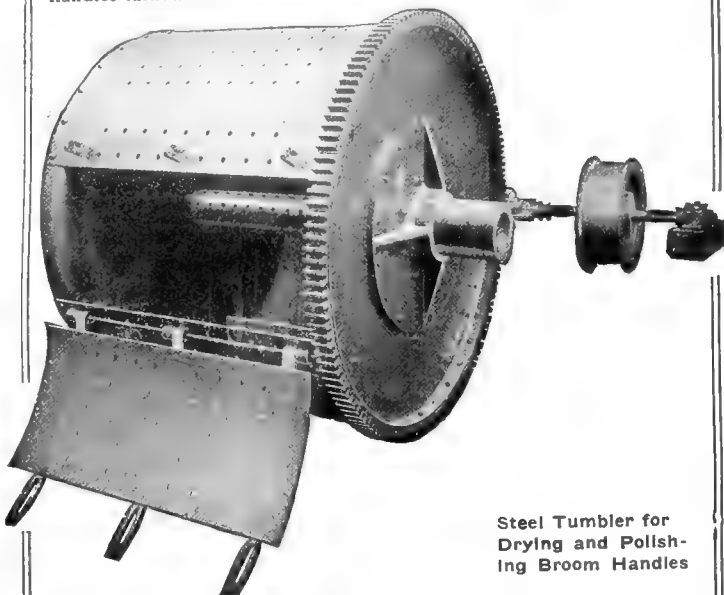
Our Seven Acre Factory at Duluth

Ask for CATALOG No. 1. THE NEW ONE

CLYDE IRON WORKS
Manufacturers at DULUTH, Minnesota, U.S.A. of
CLYDE- GRADE Logging and Hoisting Machinery

Broom Handle Machinery

Let us tell you about our **STEEL TUMBLERS FOR DRYING AND POLISHING BROOM HANDLES**. This system is rapidly supplanting all others. More economical; less time required for drying; no polishing afterwards; greater per cent of straight handles turned out.



Steel Tumbler for
Drying and Polishing
Broom Handles

CADILLAC MACHINE COMPANY
Complete Line of Broom Handle Machinery
CADILLAC, MICH.

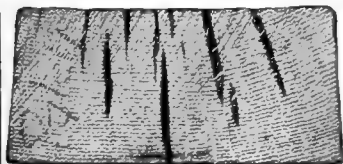
HARDWOOD RECORD'S

strongest circulation is in the region where things are made of wood—WISCONSIN, MICHIGAN, ILLINOIS, INDIANA, OHIO, PENNSYLVANIA, NEW YORK and the East.

IT'S the BEST SALES MEDIUM for HARDWOOD LUMBER

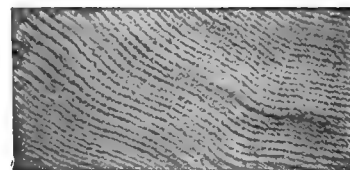
HARDWOOD RECORD

Not only the **ONLY HARDWOOD PAPER**
but the **BEST LUMBER PAPER** published



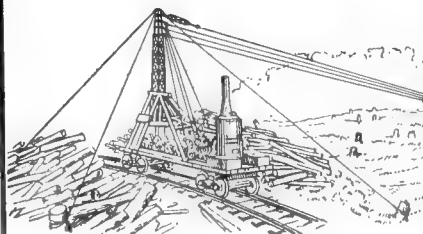
Lumber Dried As Never Before
SEE THE DIFFERENCE

GRAND RAPIDS DRY KILN
GRAND RAPIDS VENEER WKS., SOLE MFRS., MICHIGAN



The CHEAPEST HARDWOOD LOGGING
IS DONE WITH

LIDGERWOOD
CABLEWAY SKIDDERS



LIDGERWOOD MFG. CO.
96 Liberty Street, New York

Branch Offices
CHICAGO SEATTLE
Agencies
NEW ORLEANS-WOODWARD, WIGHT & CO. LTD.
CANADA-ALLIS CHALMERS BULLOCK LTD.
MONTREAL VANCOUVER

MICHIGAN

FAMOUS FOR HARD MAPLE AND GREY ELM

"Ideal" Steel Burnished Rock Maple Flooring

is the flooring that is manufactured expressly to supply the demand for the best. It is made by modern machinery from carefully-selected stock and every precaution is taken throughout our entire system to make it fulfill in every particular its name—"IDEAL."

ROUGH OR FINISHED LUMBER—ALL KINDS

Send Us Your Inquiries

The I. Stephenson Company - **WELLS, MICHIGAN**

"Chief Brand" Maple and Beech Flooring

in $\frac{3}{8}$, $\frac{1}{2}$ and 13-16 and 1 1-16 inch Maple in all standard widths and grades, will commend itself to you and your trade on its merits alone

WRITE US, WE CAN INTEREST YOU

Kerry & Hanson Flooring Co.
GRAYLING, MICHIGAN

We Want to Move Promptly

20 cars $\frac{4}{4}$ No. 2 Com. and Better Basswood
12 cars $\frac{5}{4}$ No. 2 Com. and Better Basswood
50 M 2x6-16 small red knotted White Pine
25 M $\frac{4}{4}$ Log Run White Pine

LATH
SHINGLES

MICHIGAN
HARDWOODS

PINE AND
HEMLOCK

East Jordan Lumber Co.

East Jordan, Michigan

MAKERS OF IMPERIAL MAPLE FLOORING

Michigan	150 M'	$\frac{5}{4}$	
Hard Maple	45 M'	$\frac{8}{4}$	
Firsts and	25 M'	$\frac{10}{4}$	
Seconds	60 M'	$\frac{12}{4}$	
	40 M'	$\frac{16}{4}$	
	20 M'	$\frac{5}{4}$	14" and wider
	10 M'	$\frac{6}{4}$	12" and wider
	10 M'	$\frac{10}{4}$	12" and wider
Stock now in our	12 M'	$\frac{12}{4}$	12" and wider
Detroit yard for	10 M'	$\frac{16}{4}$	12" and wider
quick shipment.			

PRICES REASONABLE, AND GRADES CORRECT

Thomas Forman Company
Detroit

Von Platen Lumber Co.

Iron Mountain, Michigan

MANUFACTURERS OF
BIRCH BASSWOOD ELM MAPLE

75,000 feet $\frac{5}{4}$ No. 1 and 2 common Maple
100,000 feet $\frac{6}{4}$ No. 1 and 2 common (Large-ly No. 1 common) Maple
25,000 feet $\frac{5}{4}$ No. 2 Com. and better Birch
40,000 feet $\frac{8}{4}$ No. 3 common Rock Elm

We Solicit Your Inquiries
SHIPMENTS VIA C. & N. W.—C., M. & ST. P.—W. & M.

C If you are not a subscriber to HARDWOOD RECORD and have a suspicion that you would like to see a copy, it is yours for the asking.

S. L. EASTMAN FLOORING CO.
SAGINAW BRAND
MAPLE FLOORING
SAGINAW, MICH.

89% of HARDWOOD RECORD subscribers are owners of steam plants. Eighty-nine per cent are, therefore, buyers of wood-working machinery. There is little percentage of waste circulation in HARDWOOD RECORD for machinery advertisers.

VENEERS AND PANELS

ESTABLISHED 1869

Adams & Raymond
Veneer Co.
 INDIANAPOLIS, INDIANA
 MANUFACTURERS
 OF
 PLAIN & FIGURED
 VENEERS
 CIRCASSIAN } WALNUT
 AMERICAN }
 QUARTERED OAK

ANY THICKNESS

If you want to employ the best system for tallying lumber, cover and specimen tickets will be sent on approval.

HARDWOOD RECORD, Chicago.

OHIO VENEER COMPANY

OFFICE AND MILLS:

2624-2634 Colerain Avenue
CINCINNATI OHIO

WE OFFER THE FOLLOWING VENEER FOR SALE:

600,000 ft. 1/28" Cut Circassian Walnut Veneer
 1,500,000 ft. 1/28" Slice Cut Figured African Mahogany Veneer
 100,000 ft. 1/24" Slice Cut Figured African Mahogany Veneer
 125,000 ft. 1/20" Sawed Mexican Mahogany Veneer
 200,000 ft. 1/20" Sawed Quartered White Oak Veneer
 280,000 ft. 1/20" Slice Cut Quartered White Oak Veneer
 150,000 ft. 1/28" Slice Cut Quartered White Oak Veneer
 350,000 ft. 1/28" Slice Cut Figured Gum Veneer
 50,000 ft. 1/28" Slice Cut Quartered Sycamore
 600,000 ft. Slice Cut African Mahogany Crotch Veneer
 70,000 ft. Cut Bird-Eye Maple Veneer

When you buy veneered panels from manufacturers who have been in successful operation for a quarter of a century you may safely depend on the product being satisfactory.

As a consumer of veneered panels you are given the benefit of our many years of experience and are enabled to put best grade of built-up stock into your work—buying it at minimum cost.

We manufacture tops and panels of all kinds—large or small—in domestic and cabinet woods. They are made right and stay right. Samples and prices submitted on application.

It will pay you to write us.

We do not claim to be lower in price, but we do claim our PANELS are cheaper in the long run as they

Will not come to pieces after they are in the furniture

Do you see the point?

The Gorham Bros. Company, Mt. Pleasant, Mich.

VENEERS AND PANELS

Ahnapee Veneer & Seating Co.

HOME OFFICE, FACTORY AND VENEER MILL, ALGOMA, WIS.
VENEER AND SAWMILL, BIRCHWOOD, WIS.

We manufacture at our Birchwood plant single ply veneers of all native northern woods and deliver stock that is in shape to glue.

From our Algoma factory, where we have specialized for twenty years, we produce panels of all sizes, flat or bent to shape, in all woods, notably in Mahogany and Quarter-Sawed Oak.

We make no two-ply stock, and do not employ sliced cut quartered oak. Our quartered oak panels are all from sawed veneer.

Every pound of glue we use is guaranteed hide stock. We do not use retainers. Our gluing forms are put under powerful screws and left until the glue has thoroughly set.

If you seek a guaranteed product that is the best, based on results accomplished by most painstaking attention and study of every detail, combined with the use of the best stock and an up-to-date equipment, our product will appeal to you.

If you are a "price buyer" we probably cannot interest you.

KIEL WOODEN WARE CO.

WHEN IN THE MARKET FOR ROTARY CUT

BIRCH
BASSWOOD
OAK
ASH
ELM

VENEER

Write Us

WISCONSIN

KIEL
FACTORY AND MAIN
OFFICE

MELLEN
VENEER AND HEADING
MILL

MUST MOVE BY JAN. 1

EXTRA!

EXTRA!

Panels—3 ply—good 1 side
3/16 Ash, 24x60 1/4 Ash, 24x60 1/4 Basswood, 24x60
30x60 30x72

IN STOCK AT CHICAGO WAREHOUSE, 1140 WEST LAKE STREET
TELEPHONE HAYMARKET 3027

Wisconsin Seating Co.

New London, Wis.

HOWARD HANSON, President

THOMAS A. TURNER, Secy. and Treas.

THE HANSON-TURNER COMPANY

MANUFACTURERS OF

ROTARY CUT VENEER AND THIN LUMBER

ELM
BEECH
CURLY BIRCH

OAK
MAPLE

BIRCH
BASSWOOD
BIRD'S-EYE MAPLE

SPECIALTIES:

DRAWER BOTTOMS BACK PANELS CENTER STOCK
BACKING PIANO PIN BLOCKS BIRCH DOOR STOCK
CURLY BIRCH BIRD'S-EYE MAPLE

OFFICE and FACTORY at WELLS, N. Y.

VENEERS AND PANELS

OUR SPECIALTY

Highly Figured Quarter-Sawed White Oak Veneer



PUTNAM VENEER & LUMBER CO.
ROACHDALE, IND.

H. I. CUTSINGER, Gen'l Mgr.

Custom Mill Work, Storage, Inspection

ON

Foreign Fancy Woods, Mahogany, Cedar, Circassian

We receive the logs, store or warehouse them, manufacture them into lumber, cut or saw veneers, pile and store the product, and ship via any railroad. Also furnish inspection returns on logs or lumber. Can furnish accommodations and economies which it is impossible to secure elsewhere. We always have on our yards parcels of plain and figured African, Mexican and Cuban Mahogany, Circassian Walnut and Cedar logs, placed here for sale by direct foreign shippers, from which advantageous purchases can be made.

Astoria Veneer Mills & Dock Co.

Long Island City, New York

Veneers and Panels with a Reputation

WE manufacture Veneers in all the native woods and for all purposes. Also Built-up Panels in native and foreign woods—three and five-ply—and have established a reputation for furnishing high-grade material. Send us your inquiries and orders and become one of our satisfied customers.

Underwood Veneer Co.

Wausau, Wis.

“SOVEMANCO.”

We can furnish anything you want in

Sawed and Sliced Foreign and Domestic Figured Veneers

Capacity 15 million feet per year. Ready to take care of carload orders promptly. Small orders shipped same day received, if desired.

SOUTHERN VENEER MFG. CO., Inc.

Office, 21st and Standard.

LOUISVILLE, KY.

Mills, Magnolia, Standard and 21st Sts.

THE SOUTH

PROMINENT SOUTHERN MANUFACTURERS

ANY REASONABLE OFFER

6,000 ft. 3/4" 1s-2s Qrtd. White Oak, 6" & up.	5,000 ft. 5/4" No. 2 Com. Qrtd. White Oak.	20,000 ft. 6/4" 1s-2s Qrtd. Red Oak, 6" & up.
8,500 ft. 3/4" No. 1 Com. Qrtd. White Oak, 6" & 7".	5,700 ft. 2 1/4" Com. & Bet. Plain White Oak.	15,000 ft. 8/4" 1s-2s Qrtd. Red Oak, 6" & up. Very wide run.
5,000 ft. 6/4" No. 1 Com. Qrtd. White Oak.	35,000 ft. 4/4" No. 2 Com. Red & White Oak.	17,000 ft. 4/4" 1s-2s Qrtd. Poplar.
2,700 ft. 5/8" No. 2 Com. Qrtd. White Oak.	40,000 ft. 4/4" 1s-2s Qrtd. Red Oak, 6" & up.	7,500 ft. 4/4" 1s-2s Yel. Poplar, 7" & up wide.
35,000 ft. 4/4" No. 2 Com. Qrtd. White Oak.	15,000 ft. 5/4" 1s-2s Qrtd. Red Oak, 6" & up.	13,000 ft. 5/4" Com. & Bet. Poplar, 13" & up.
		26,000 ft. 6/4" Clear Saps. Good widths and lengths.
		38,000 ft. 6/4" No. 1 Common. Good widths and lengths.

**WILL BUY THE FOLLOWING STOCK:
DRY—IN FINE CONDITION**

We, of course, have a complete stock of Quartered and Plain Oak, Poplar and Hickory, etc., in all grades and thicknesses; and will be glad to have your inquiries for anything you may need.

J. V. STIMSON & CO.

OWENSBORO, KY.

WE MANUFACTURE AND
DEAL IN

TIES, HARDWOOD LUMBER AND TIMBER

We want to buy a large
amount of 4/4, 8'—8'6"
Oak from Tie Sides

Hill Bros. Tie & Lumber Company
Charleston, W. Va.

PUT US ON YOUR GUM MAP

In the next ninety days, our mills
will cut about 3,000,000 feet

RED and SAP GUM

H. H. HITT LUMBER COMPANY

MANUFACTURERS

TENNESSEE VALLEY HARDWOODS
DECATUR, ALABAMA

Louisiana Long Leaf Lumber Co.
Fisher, Louisiana

Diamond



Brand

OAK FLOORING
A GUARANTEE OF PERFECTION

Boice Lumber Co., Inc.

Southern Hardwoods

MAIN OFFICE
RICHMOND, VIRGINIA

Yards: NORFOLK, ABINGDON, GRAHAM, VA.,
and NORTH WILKESBORO, N. C.

Hardwood Record's

strongest circulation is in the region where
things are made of wood—WISCONSIN,
MICHIGAN, ILLINOIS, INDIANA,
OHIO, PENNSYLVANIA, NEW YORK
and the East. **It's the BEST sales
medium for hardwood lumber.**



THE SOUTH

PROMINENT SOUTHERN MANUFACTURERS

**Himmelberger-Harrison
Lumber Co.**

**Specialists
Red Gum**

Mills at
Morehouse, Mo.

Sales Offices
Cape Girardeau, Mo.

William S. Whiting

MANUFACTURER AND WHOLESALE

WHITE PINE

BASSWOOD

BIRCH

BUCKEYE

CHESTNUT

MAPLE

POPLAR

OAK

ASHEVILLE, N. C.

Salt Lick Lumber Co.

SALT LICK

KENTUCKY

MANUFACTURERS OF

Eureka
OAK AND BEECH

Oak Flooring

Complete stock of $\frac{3}{8}$ " and $\frac{13}{16}$ " in all
standard widths

WE HAVE IT

CHERRY
50 M ft. 4/4
No. 3
Common

CHESTNUT
100,000 feet
of 8/4 Sound
Wormy and
No. 2 Com-
mon.

W. W. DEMPSEY

Manufacturer and
Wholesaler of

HARDWOODS

CYPRESS
250,000 feet
of 4/4 No. 1
Common &
Better, Old
grading.

SPRUCE
4/4 and 8/4
Clear and
Select, 8/4
Box and Mill
Cull

BAND SAWED STOCK

A LINE BRINGS PRICE BY RETURN MAIL

General Offices
Johnstown, Pa.

New York Office
No. 18 Broadway

A FEW ITEMS OF DRY STOCK

We Want to Move

2 cars 4/4 1st & 2nds Cypress.
2 cars 4/4 select Cypress.
4 cars 4/4 No. 1 Shop Cypress.
1 car 2" 1sts & 2nds Cypress.
1 car 2" Select Cypress.
1 car 4/4 1sts & 2nds Cotton-
wood.
5 cars 3" mixed oak Crossing
Plank.

10 cars 4/4 1sts & 2nds Red Gum.
2 cars 5/4 No. 1 Common Ash.
2 cars 4/4 1sts & 2nds Ash.
1 car 2" 1sts & 2nds Ash.
2 cars 4/4 18" & wider Panel
Cottonwood.
8/4 to 18/4 No. 1 Common and
better Plain Red and White
Oak.

BAKER-MATTHEWS MFG. CO.

SIKESTON, MO.

WRITE US FOR PRICES

GARETSON-GREASON LUMBER CO.

1002-1005 Times Bldg.

ST. LOUIS

MANUFACTURERS

Three Mills

Frank Purcell Kansas City
U. S. A.

Exporter of **Black Walnut Logs**



MARK

**FIGURED WALNUT IN LONG WOOD
AND STUMPS**

"WE ARE GETTING RESULTS"

WRITES ONE ADVERTISER

This Means That He Is Getting

NEW BUSINESS

Through His Ad

If we can do it for him is there any logical
reason why we can't for you?

MAKE US PROVE IT

HARDWOOD RECORD, CHICAGO

WISCONSIN

WHERE THE FINEST NORTHERN HARDWOODS GROW

WE MANUFACTURE MICHIGAN
HARDWOODS AND HEMLOCK.
MILLS ELECTRICALLY
DRIVEN; STOCK
BAND SAWN

Have in Shipping Condition

BIRCH: NO. 2 AND BETTER, 4/4 to 12/4
ASH: NO. 2 AND BETTER, 4/4 to 12/4
ELM: NO. 2 AND BETTER, 4/4 to 12/4
BASSWOOD: NO. 2 AND BETTER, 4/4
to 12/4

WE are well equipped for manufacturing
special sizes, wagon stock, skids, ties, etc.

THE C. A. GOODYEAR LUMBER COMPANY
Office and Mill Logging Camp
TOMAH, WISCONSIN BLUE BILL, MICHIGAN

GET OUR PRICES ON

1 car 1" No. 1 Common & Btr. Red Birch.
10 cars 1" No. 2 Common & Btr. Plain Birch.
5 cars 1" No. 1 and No. 2 Common Plain Birch.
2 cars 1 1/4" No. 2 Common & Btr. Plain Birch.
2 cars 1 1/2" No. 2 Common Plain Birch.

Can ship in straight or
mixed cars with other lumber

ROBBINS LUMBER COMPANY
Rhineland, Wisconsin

SAWYER GOODMAN CO.

MARINETTE, WIS.

Mixed Cars of Hardwood, Bass-
wood, White Pine and Hemlock,
Cedar Shingles and Posts

We make a specialty of White Pine Beveled Siding and
White Pine Finish and Shop and Pattern Lumber

We want to move the following air-seasoned stock

5 cars 6/4" No. 2 Com. & Better Birch
3 cars 5/4" No. 2 Com. & Better Birch
1 car 8/4" No. 2 Com. & Better Birch
1 car 8/4" No. 1 Com. & Better Birch
3 cars 4/4" No. 1 Com. Birch
2 cars 4/4" No. 2 Com. Birch

OELHAFEN LUMBER CO.
TOMAHAWK, WISCONSIN

The Tegge Lumber Co.

MILWAUKEE
WISCONSIN

BUYERS OF
ALL KINDS OF

HARDWOOD LUMBER

IF YOU HAVEN'T SEEN THE GIBSON TALLY BOOK

Let us send you one on approval, with samples of Tally
Tickets for triplicate, duplicate or single tallies—a score
of forms to choose from. They are the latest and best. En-
dorsed by hundreds of lumber manufacturers and buyers.

HARDWOOD RECORD

CHICAGO

BUFFALO

The Foremost Hardwood Market of the East

Standard Hardwood Lumber Co.

**OAK, ASH and
CHESTNUT**

1075 Clinton Street

BUFFALO HARDWOOD LUMBER CO.

We want to buy for cash

OAK, ASH AND OTHER HARDWOODS

All grades and thicknesses.
Will receive and inspect stock at shipping point.
Branch yard, Memphis, Tenn.

940 Seneca Street,

BUFFALO

T. SULLIVAN & CO.

SPECIALTIES:

Gray Elm, Brown Ash

Pacific Coast Fir and Spruce

2 ARTHUR STREET

ORSON E. YEAGER

SPECIALTIES:

Oak, Ash and Poplar

932 ELK STREET

ANTHONY MILLER

**HARDWOODS
OF ALL KINDS**

893 EAGLE STREET

G. ELIAS & BRO.

HARDWOODS

White Pine, Yellow Pine, Spruce,
Hemlock, Fir, Lumber, Timber, Mill-
work, Boxes, Maple and Oak Flooring

955-1015 ELK STREET

Hugh McLean Lumber Co.

OUR SPECIALTY:

**QUARTERED
WHITE OAK**

940 ELK STREET

I. N. Stewart & Bro.

Specialties

Cherry and Oak

892 Elk Street

The above firms carry large and well assorted stocks of all kinds and grades of Hardwoods, and have every facility for filling and shipping orders promptly. They will be pleased to have your inquiries.

Vansant,

Manufacturers Old-Fashioned

5-8 and 4-4
in Wide Stock,
Specialty

Kitchen &

Soft
Yellow
Poplar

Company

Ashland, Kentucky

EASTERN REPRESENTATIVE, John L. Cochran
601 W. 115th Street, New York City

CHICAGO OFFICE, Steger Building
W. H. Matthias, Manager.

YOU pay a *little* more for our hardwood lumber than you do for many others', but it's worth *much* more.

With our modern and first-class equipment and expert operatives, we couldn't make bad lumber if we tried to, because the *quality* and *size* of our virgin tough mountain white ash, red birch, yellow poplar, buckeye, maple, red oak, cherry and basswood, averaging less than three logs to the thousand, and 95 per cent sixteen feet, is the best type of hardwood timber growth in the United States, and shows a larger percentage of *firsts*.

If you are a discriminating buyer, let's get acquainted.

LITTLE RIVER LUMBER COMPANY

Townsend, Tenn.

W. H. White Company Boyne City Lumber Company

Mills and General Office: BOYNE CITY, MICH.

Sales Office: BUFFALO, N. Y.

WE OFFER

4/4 and 5/4 No. 2 common and better
Basswood

4/4 No. 2 common and better Brown
Ash

4/4 and 5/4 No. 2 common and better
Birch, strictly unselected for color

4/4 and 5/4 No. 1 and No. 2 common
Flooring Maple.

4/4, 5/4, 6/4, 8/4, 10/4, 12/4 and 16/4
Firsts and Seconds Maple

STOCK DRY—STANDARD GRADES—BEST
MANUFACTURE—CAR OR CARGO SHIPMENTS

YELLOW POPLAR

MANUFACTURERS OF BAND SAWED

POPLAR
QUARTERED OAK
PLAIN OAK
CHESTNUT
BASSWOOD



SPECIALTY
QUARTER SAWED
WHITE OAK

Coal Grove, Ohio, U. S. A.

LUMBER CO.

Aardwood Record

Eighteenth Year, }
Semi-Monthly. {

CHICAGO, JANUARY 25, 1913

{ Subscription \$2.
{ Single Copies, 10 Cents.



Special Woods— for Special Work

With an organization that maintains yards in the heart of the best lumber districts, we are in a position to fill your orders for practically any size, grade, or kind of wood—and we are not too big to appreciate only the larger orders.

When you have Special Work—remember that you can get the Special Wood, delivered promptly and at the right price, from

J. GIBSON McILVAIN & Co.
1420 Chestnut Street **Philadelphia, Pa.**

HOLLOWAY HARDWOODS

*The following Yellow Cottonwood
is band-sawn and runs*

60% 14' and 16'

COTTONWOOD

176,850 feet 4/4 1st & 2nd 6" to 12".

89,432 feet 4/4 1st & 2nd 13" & wider.

163,421 feet 4/4 No. 1 Common, containing all the wide.

Holloway Hardwood Lumber Co.
20 W. Jackson Blvd. Chicago

Wood-Using Factories

CAN OPERATE to the best advantage in **WAUSAU**, the point of greatest lumber production in Wisconsin.

A TRIBUTARY SUPPLY of Hemlock, Tamarack, Pine, Cedar, Ash, Basswood, White and Yellow Birch, Hard and Soft Maple, Rock and Soft Elm, furnishes timber suitable for almost every product in which wood is the raw material.

WAUSAU has cheap power, good freight service, dependable labor, the best of modern living conditions in a healthful climate, and excellent factory sites obtainable on the most reasonable terms. This is why Wausau is "The Place for Wood-Using Factories."

WRITE FOR our books, "Wausau, a Good Place to Come," and "Factory Facilities in Wausau."

**The Wausau Advancement
Association**
Wausau, Wisconsin

MICHIGAN

FAMOUS FOR HARD MAPLE AND GREY ELM

Michigan Hardwoods

MANUFACTURED BY

COBBS & MITCHELL, Inc.

CADILLAC, MICH.

January 13th, 1913

DRY STOCK LIST

4/4 Basswood No. 1 Common.....	75 M
4/4 Birch 1s & 2s Red Curly and Wavy.....	11 M
4/4 Cherry No. 3 Common & Better.....	9 M
4/4 Cadillac Gray Elm No. 1 Common.....	100 M

"It is not what lumber costs you, so much as what you can get out of it, that decides its value for your work."

OUR OWN MANUFACTURE

W. D. YOUNG & CO.

MANUFACTURERS

FINEST MAPLE FLOORING

KILN DRIED, HOLLOW BACKED
MATCHED OR JOINTED
POLISHED AND BUNDLED

Hard Maple, Beech and Birch Lumber

1 TO 6 INCHES THICK WRITE FOR PRICES
BAY CITY, :: MICHIGAN

Something New For Your Factory Floors

Utility Joined With Economy

We are now manufacturing what we call a No. 2 Factory grade of Hardwood Flooring which can be used successfully in factory buildings where good wearing qualities rather than appearance are required. This Flooring is made from the hardest portion of the log, and while the Flooring shows the heart defect to a considerable extent, nevertheless it will wear with wonderful durability. It is "Rockhard" flooring at a rock bottom price.

It is 13/16 x 2 1/4" face, and the Flooring is kiln dried, hollow backed, bored, end matched, steel scraped and bundled.

Write us about it. This is a grade of Hardwood Flooring you should know about. Address MITCHELL BROTHERS COMPANY, Sales Department, CADILLAC, MICHIGAN.

THE Kneeland-Bigelow Co.

300,000 Feet

5/4 No. 2 Common and Better Beech

HARDWOOD MANUFACTURERS

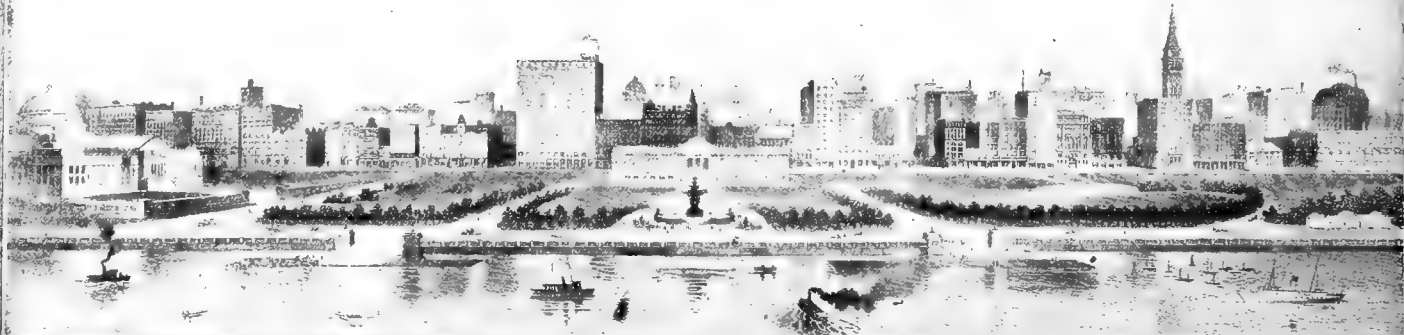
250,000 ft. 5/4 No. 1 Common Basswood

This is of good average widths and lengths, containing a large percentage of 16 ft.

All of the above stock is nicely manufactured, being hand sawed, trimmed, and well seasoned. We are prepared to quote attractive prices for this material for immediate shipment.

BAY CITY, MICH.

CHICAGO



J. RAYNER VENEERED PANELS

ALL WOODS

SEND FOR STOCK LIST

MAHOGANY LUMBER

CARROLL AVE. AND SHELDON ST.
CHICAGO

Going up—Hardwood Timber

We have the following hardwood and pine timber for sale at prices that have not as yet been advanced with the rise in value on timber lands. For a short time we offer—

150,000,000 FEET HARDWOOD IN SOUTHEAST ARKANSAS — A SPLENDID OPPORTUNITY.

7,600,000 FEET OF HARDWOOD IN SOUTH-WEST ARKANSAS

We also have timber in British Columbia and on the Pacific Coast and Oregon.

For further particulars, address

John C. Spry

Room 1003 Harris Trust Bldg.,

Chicago, Illinois

Estabrook-Skeele Lumber Co.

MANUFACTURERS AND DEALERS IN

Maple, Birch, Elm, Basswood, Ash
And Other Northern Hardwoods

In the Market for Round Lots of Hardwood

WRITE US BEFORE SELLING

Fisher Building, - - - CHICAGO

PHONE HARRISON 1984

A floor to adore



For thirty-three years Wilce's Hardwood Flooring has been among the foremost on the market and because it stands today "unequaled" is the best evidence that its manufacturer has kept abreast of modern methods and the advanced demands of the trade. To convince yourself of the above statements, try our polished surface flooring, tongued and grooved, hollow backed, with matched ends and holes for blind nailing—you'll find it reduces the expense of laying and polishing.

Our Booklet tells all about Hardwood Flooring and how to care for it—also prices—and is free.

The T. Wilce Company

22nd and Throop Sts. CHICAGO, ILL.

SAVE YOUR MONEY BY USING THE

RED BOOK

Published Semi-annually
in February and August

It contains a carefully prepared list of the buyers of lumber in car lots, both among the dealers and manufacturers.

The book indicates their financial standing and manner of meeting obligations. Covers the United States, Alberta, Manitoba and Saskatchewan. The trade recognizes this book as the authority on the lines it covers.

A well organized Collection Department is also operated and the same is open to you. Write for terms.

Lumbermen's Credit Assn., ESTABLISHED 1878

608 So. Dearborn St.
CHICAGO

Mention This Paper.

116 Nassau Street
NEW YORK CITY

SECURE BETTER PRICES

AT LESS SELLING COST BY REACHING MORE CUSTOMERS. HARDWOOD RECORD PUTS YOU BEFORE THEM ALL TWICE A MONTH.

ASK US ABOUT IT

Never Touched Us!

On account of widespread and, as usual, exaggerated reports of flood damage in the Ohio Valley, including Louisville, we take pleasure in announcing that the business of this market is proceeding without interruption.

With few exceptions the yards of our members are not close enough to the river to be in danger from floods; and in the cases of those concerns which were in the path of the river the damage was slight and the inconvenience temporary. Business is rapidly approaching normal with these concerns, and they are in a position to take care of the wants of their customers just as before.

The co-operative features of this organization would have sufficed, even if the situation had developed serious features, to relieve buyers of any inconvenience, no matter how slight, which might have resulted from the suspension of operations by individual members. As it is, of course, the necessity for the extension of this assistance has not arisen, inasmuch as each company is now prepared to take care of its own business without trouble.

Inquiries for quotations on hardwood lumber, veneers and panels are invited. The attention of buyers of mixed cars is especially directed to the facilities which we possess in this connection.

The Louisville Hardwood Club

EDWARD L. DAVIS LUMBER COMPANY

BOOKER-CECIL COMPANY

W. P. BROWN & SONS LUMBER COMPANY

NORMAN LUMBER COMPANY

(Mill at Holly Ridge, La.)

LOUISVILLE POINT LUMBER COMPANY

OHIO RIVER SAWMILL COMPANY

THE LOUISVILLE VENEER MILLS

C. C. MENGEL & BRO. CO.

KNOXVILLE

Famous for Finest Type of Poplar, Oak and Chestnut

VESTAL LUMBER AND MANUFACTURING CO. KNOXVILLE, TENNESSEE.

QUARTERED WHITE OAK OUR SPECIALTY

MANUFACTURERS OF
QUARTERED WHITE OAK, PLAIN OAK, POPLAR, WALNUT & TENNESSEE RED CEDAR LUMBER
BAND MILLS AT VESTAL, A SUBURB OF KNOXVILLE. SOUTHERN AND LOUISVILLE & NASHVILLE RAILROAD

H. S. MIZNER,
Pres.

C. C. CANNON,
Vice-Pres.

J. M. LOGAN,
Gen'l Manager

C. R. SWANN,
Sec'y and Treas.

J. M. LOGAN LUMBER CO.

MANUFACTURERS AND WHOLESALERS
HARDWOODS AND PINE
POPLAR A SPECIALTY

Main Office and Yards: Knoxville

Branch Office and Yard:

Bank and McLean Ave., Cincinnati I. M. ASHER, Mgr.

We Want Orders for the following Dry Stock:
WHITE OAK—Plain or Quartered.

RED OAK—Plain or Quartered.

CHESTNUT

BASSWOOD

POPLAR

WHITE PINE

Always carry large well
assorted stock of all
kinds of Hardwoods.

CAN SHIP ON SHORT NOTICE.

Maphet & Shea Lumber Co. Manufacturers and Wholesalers

OFFICE: 703-705 HENSON BUILDING

Yard: Middlebrook Pike and
Lonsdale Car Line

KNOXVILLE, TENN.

WE WANT TO MOVE

3 cars 4/4 No. 1 Common Poplar, 7" & up
2 cars 4/4 Clear Sap Poplar, 7" & up
1 car 4/4 Select Poplar, 7" & up
1 car 4/4 1 & 2 Red Oak, 10" & up
1 car 4/4 1 & 2 Chestnut
1 car 4/4 No. 1 Common Chestnut

We manufacture: YELLOW POPLAR,
OAK, CHESTNUT, WHITE AND YEL-
LOW PINE, HEMLOCK BARK, ETC.

BAND AND CIRCULAR MILLS—EAST TENN.
MOUNTAIN VIRGIN HARDWOOD STUMPAGE

Kimball & Kopcke Knoxville, Tennessee

Manufacturers and Shippers of
Appalachian Hardwoods
OAK OUR SPECIALTY

"THE VERY BEST" Red Birch

Knoxville Veneer Co.

P. B. RAYMOND, General Manager, Knoxville, Tenn.

West Virginia Timber Company

POPLAR, OAK,
CHESTNUT AND BASSWOOD
LUMBER.
BILL OAK, HEMLOCK, CHAIR
AND
DIMENSION STOCK.

CHARLESTON, W. VA.

2 cars 6/4" Common & Better
Chestnut.

2 cars 4/4" 1sts & 2nds Cypress.

5 cars 4 4" 1sts & 2nds Red Gum.

5 cars 4 4" No. 1 Common Red Gum.

5 cars 4/4" 1sts & 2nds Sap Gum.

NASHVILLE

CELEBRATED FOR HIGHEST TYPE TIMBER GROWTH, FAULTLESS MANUFACTURE AND GOOD GRADES

Tennessee Hardwoods

**Tennessee Hardwood
Lumber Co.**

West Nashville

Cherokee Lumber Co.

Manufacturers of all the lumber we sell.
Let us quote you some attractive prices
on quartered white oak and poplar.
Any grades and thicknesses.

NASHVILLE, TENN.

We will name very attractive
prices on a few cars of each of the
following items:

4/4, 6/4, 10/4 and 12/4 1s and 2s Poplar.
4/4 and 8/4 Sap Poplar.
1 1/4", 1 1/2" and 2 1/2" No. 1 Common Poplar.
4/4 No. 1 and Panel Poplar in widths of 12 to 17", 18 to 23"
and 24" and up.
4/4 x 18 to 17" Poplar Box Boards.
4/4 1s & 2s Basswood or Linn—very fine.
3/8, 4/4, 5/4, 10/4 and 12/4 1s & 2s Qtd. W. Oak.
4/4, 5/4, 6/4 and 8/4 No. 1 Common Qtd. W. Oak.
6/4 1s & 2s Qtd. R. Oak.
4/4, 5/4 and 6/4 No. 1 Common Qtd. R. Oak.
6/4 and 10/4 1s & 2s Hickory.
4/4, 6/4, 10/4 and 12/4 No. 1 Common Hickory.
4/4, 6/4, 8/4, 10/4 and 12/4 No. 2 Common Hickory.
4/4 1s & 2s Chestnut, also 5, 6 and 8/4.
4/4 No. 1 Common Chestnut.

John B. Ransom & Co.

MANUFACTURERS OF

Hardwood Lumber

Nashville, Tenn.

LAMB-FISH LUMBER CO.



Band Mill and General Offices

CHARLESTON, MISS.

**THE LARGEST HARDWOOD MILL IN THE WORLD
ANNUAL CAPACITY, 40,000,000**

STOCK LIST—Dry Lumber on Hand January 1, 1913

TELEGRAPH
CODES
UNIVERSAL
HARDWOOD
WESTERN UNION
Cable Address, Lamb

	3/8	1/2	5/8	3/4	4/4	5/4	6/4	8/4	10/4	12/4	16/4
FAS Quartered White Oak.....	6,000	60,000	20,000	30,000	30,000	25,000	7,000	.....	.....	.....	.....
No. 1 Com. Quartered White Oak.....	.....	12,000	.....	16,000	150,000	.....	.....	.....	.....	.....	.....
No. 2 Com. Quartered White Oak.....	.....	5,000	.....	.....	10,000	.....	.....	.....	.....	.....	.....
FAS Plain White Oak.....	30,000	100,000	20,000	.....	.....	40,000	.....	.....	3,000	.....	2,000
No. 1 Com. Plain White Oak.....	.....	.....	40,000	12,000	150,000	5,000	.....	3,000	9,000	.....	.....
FAS Plain White Oak 12" & up.....	.....	.....	.....	4,000	.....	.....	.....	.....	.....	.....	.....
FAS Plain Red Oak.....	.....	.....	30,000	20,000	150,000	.....	.....	.....	.....	.....	1,000
No. 1 Com. Plain Red Oak.....	.....	.....	18,000	25,000	50,000	.....	18,000	1,000	.....	.....	.....
Com. & Better Qrtd. Red Gum.....	.....	.....	.....	.....	50,000	.....	.....	.....	.....	.....	.....
FAS Red Gum—Plain.....	200,000	150,000	110,000	250,000	220,000	40,000	60,000	40,000	.....	3,000	.....
FAS Circassian Red Gum.....	.....	.....	.....	12,000	20,000	.....	3,000	1,000	.....	.....	.....
No. 1 Com. Red Gum.....	60,000	20,000	130,000	40,000	50,000	50,000	20,000	8,000	.....	.....	.....
FAS Sap Gum 18" & Up.....	.....	.....	.....	.....	80,000	.....	.....	.....	.....	.....	.....
FAS Sap Gum 6" & up.....	100,000	40,000	20,000	50,000	.....	15,000	20,000	10,000	.....	.....	.....
No. 1 Com. Sap Gum.....	.....	.....	100,000	150,000	200,000	40,000	.....	.....	.....	.....	.....
No. 2 Com. Sap Gum.....	50,000	30,000	25,000	100,000	.....	200,000	15,000	.....	.....	.....	.....
Shop & Better Cypress.....	.....	.....	.....	.....	15,000	.....	.....	30,000	.....	.....	.....
Common & Better Tupelo.....	.....	.....	.....	.....	40,000	.....	.....	.....	.....	.....	.....

OUR LUMBER CONTAINS ALL WIDE STOCK PRODUCED IN MANUFACTURING AND WILL RUN OVER 50% OF 14 AND 16 FT. LENGTHS. WE ALSO MANUFACTURE OAK TIMBERS AND BRIDGE PLANK—FACILITIES FOR KILN DRYING AND DRESSING

“STEARNS” QUALITY LUDINGTON

HARDWOOD SPECIALISTS

RESOLVED: That it shall be our aim to gain as many satisfied customers as we have during the past year, and that we will maintain the high standard of manufacture—quality—grades and service established.

OUR INVENTORY SPECIALS

5 cars 4/4 No. 1 Com. & Btr. Cross Piled Sap Hard Maple.	1 car 8/4 1sts & 2nds Hard Maple Step Plank.
3 “ 5/4 End Dried Sap Hard Maple.	1 “ 10/4 No. 1 Com. & Btr. Soft Grey Elm.
2 “ 6/4 End Dried Sap Hard Maple.	2 cars 6/4 No. 1 Common Soft Grey Elm.
1 car 6/4 1sts & 2nds Hard Maple Step Plank.	3 “ 6/4 No. 2 Common Soft Grey Elm.

YOU CAN READ QUALITY BETWEEN THE LINES

The **STEARNS**
SALT & LUMBER CO. LUDINGTON, MICH.

KENTUCKY LUMBER COMPANY

Manufacturers

CINCINNATI, OHIO

OFFER AS SPECIALS

28 M. ft. 5 8" Panel Poplar.
 40 M. ft. 4 4 Panel Poplar.
 100 M. ft. 4 4 1s & 2s Poplar.
 50 M. ft. 5 4 1s & 2s Poplar.
 200 M. ft. 4 4 Select Poplar.
 30 M. ft. 5 4 Select Poplar.
 100 M. ft. 4/4 Moulding Poplar.

150 M. ft. 4 4 No. 1 Com. & Better
 Chestnut.
 50 M. ft. 6/4 Cull Ash.
 40 M. ft. 6 4 No. 1 Com. Plain
 Oak.
 50 M. ft. 4/4 Wormy Oak.
 100 M. ft. 4/4 No. 1 Com. & Better
 Red Gum.

BAND SAWN HARDWOODS

WE PRODUCE OUR OWN STOCKS

OAK—Plain and Quartered, Red and White

COTTONWOOD—Ash, Southern Elm, Gum, Soft Maple

A FEW ITEMS WE WANT TO MOVE:

100,000 ft. 4/4" x 18" to 21" 1st & 2nds Cottonwood.
 50,000 ft. 5/4" x 13" to 17" 1st & 2nds Cottonwood.
 100,000 ft. 4/4" x 9" to 12" Cottonwood Box Boards.
 200,000 ft. 4/4" x 13" to 17" Cottonwood Box Boards.
 100,000 ft. 4/4" 1st & 2nds Red Gum.
 100,000 ft. 5/8" 1st & 2nds Sap Gum.

WRITE US FOR PRICES

ANDERSON-TULLY COMPANY
HARDWOOD LUMBER **Memphis, Tenn.**

500 Copies Sold Within a Week After Prospectus Was Issued

Hardwood Record announces the issue on March 1, 1913, of an Authoritative Commercial and Scientific Book

American Forest Trees

By Henry H. Gibson, Editor Hardwood Record
Edited by Hu Maxwell, Wood Utilization Expert

The Work Involves :

First: A botanical description of the more than 300 species of American forest tree growth.

Second: A physical description of the wood of these species.

Third: A recital of the chief uses of all important American woods, together with suggestions of advantageously broadening their uses.

Fourth: Complete information concerning the range of growth of all varieties.

Fifth: Related trees are logically grouped according to families and spe-

cies; important species covered in substantial detail, and brief mention of the woods of minor importance.

Sixth: Scientific name of each tree is recited, as well as the various common names by which it is recognized in different parts of its range of growth.

Seventh: The properties of the various woods are carefully analyzed, particularly weight, hardness, stiffness, strength, elasticity, toughness, color, figure, and seasoning and lasting properties.

❑ The book will contain between 650 and 750 pages, will be printed on the best quality of enameled paper, and handsomely bound in half leather, dark green roan back and corners, with basket cloth sides, silk head-bands, gold stamping on the back, and gilt top.

❑ The work will be illustrated with more than 100 full-page pictures on plate paper in sepia, outlined in orange, from photographs, covering all the chief commercial varieties of virgin forest timber growing in the United States; and also with numerous engravings, from drawings and photographs, showing leaf and flower forms, etc.

❑ The price of the work is \$6.00, delivered by express or mail, and is sold only on subscription.

❑ An order blank, and a prospectus, showing the character of the paper, size of page and style of printing will be forwarded on application.

Address Book Department, HARDWOOD RECORD

537 South Dearborn Street

Chicago, Illinois

ORDERS SHOULD BE PLACED AT ONCE

CINCINNATI

THE GATEWAY OF THE SOUTH

WE WANT TO BUY

1", 1 1/4", 1 1/2" 1s & 2s AND NO. 1 COMMON SAP GUM
1", 1 1/2" & 2" 1s & 2s AND NO. 1 COMMON RED GUM
1" NO. 1 COMMON TUPELO.

SUBMIT US YOUR STOCK SHEETS
WITH BEST CASH PRICES

DUHLMEIER BROS.
CINCINNATI, OHIO

BENNETT & WITTE

We are going to move the following lot of
high grade Lumber during the next few weeks

2 cars 4/4" 1 & 2 Red Gum, 1S" to 27" wide.	2 cars 4/4" Cottonwood Box Bds., 3" up.
3 cars 4/4" No. 1 Com. Qrtd. Red Oak.	2 cars 4/4" 1 & 2 Poplar.
3 cars 4/4" No. 1 Com. Qrtd. White Oak.	1 car each 12/4" No. 1 Com. Selects & 1 & 2 Poplar.
1 car 12/4" 1 & 2 Plain White Oak.	1 car 4/4", 5/4" & 6/4" 1 & 2 Ash, 12" & up wide.
2 cars 5/8" No. 2 Com. Plain Oak.	1 car 8/4", 10/4", 12/4" & 16/4" 1 & 2 Ash, 12" up wide.

Main Office
CINCINNATI, OHIO

SOUTHERN OFFICE, MEMPHIS, TENN.
EXPORT OFFICE, NEW ORLEANS, LA.

MOWBRAY & ROBINSON

SPECIALISTS IN

OAK—ASH—POPLAR

ALWAYS IN THE MARKET FOR
ROUND LOTS OR MILL CUTS

OFFICE AND YARDS
SIXTH ST., BELOW HARRIET

CINCINNATI

89%

of HARDWOOD RECORD subscribers are
owners of steam plants. Eighty-nine per
cent are, therefore, buyers of wood-work-
ing machinery. There is little percentage
of waste circulation in HARDWOOD
RECORD for machinery advertisers.

W. E. HEYSER, President WEAVER HASS, V. President
BENJAMIN BRAMLAGE, Sec'y & Treas.

The W. E. Heyser Lumber Company

MAIN OFFICE & YARDS
Winton Place
Cincinnati, Ohio

BRANCH YARDS AND MILLS
West Virginia, Mississippi, Arkansas & Kentucky

12,000,000 ft. High Shipments made
Grade West Vir- direct from our
ginia and Southern own yards and
Hardwoods in mills in straight or
stock at all times. mixed cars.

SEND US YOUR INQUIRIES

The Maley, Thompson & Moffett Co.

Veneers, Mahogany and Hardwood Lumber

Largest Stocks

Best Selections

CINCINNATI, OHIO

L. W. RADINA & CO.

DEALERS IN

POPLAR AND HARDWOODS

CINCINNATI : : OHIO

THE EAST

BOSTON

NEW YORK

PHILADELPHIA

WM. WHITMER & SONS

INCORPORATED

Manufacturers and Wholesale-
salers of All Kinds of"If Anybody Can,
We Can"

HARDWOODS

West Virginia Spruce and Hemlock
Long and Short Leaf Pine Virginia Framing

Franklin Bank Bldg.

PHILADELPHIA

Willson Bros. Lumber Co.

MANUFACTURERS

WEST VIRGINIA HARDWOODS

Oliver Building

PITTSBURG, PA.

AMERICAN LUMBER & MFG. CO.

Manufacturers and Wholesalers PITTSBURGH, PA.

HARDWOOD White and Yellow Pine

We make a specialty of thick Railroad Car and Construction
White Ash, Hard Maple and Oak timbers, long lengths and
White Oak. special sizes.

Write for prices before heavy call for Spring requirements.

WISTAR, UNDERHILL & NIXON

REAL ESTATE TRUST BUILDING, PHILADELPHIA, PA.

QUARTERED WHITE OAK

NICE FLAKY STUFF

H. D. WIGGIN

89 STATE STREET
BOSTON, MASS.

MANUFACTURER HARDWOOD LUMBER

Circular-sawed Poplar, Oak, Chestnut, Basswood, Maple

Mill at Stone Coal Junction, West Virginia

We Know How to fill your orders for all kinds of HARD-
WOODS, WHITE PINE, YELLOW PINE,
SPRUCE, HEMLOCK, CYPRESS, HARDWOOD FLOORING.

Give us a trial.

THOMAS E. COALE LUMBER COMPANY

FRANKLIN BANK BUILDING, PHILADELPHIA, PA.

WHITE OAK } 6x6 to 12x12 BILL TIMBERS } 10 to 20 ft.

ALSO BRIDGE PLANK

J. S. KENT COMPANY PHILADELPHIA

FOR QUICK SHIPMENT
1 car 4/4 1s and 2s Red Oak, 14 & 16' long, 16" & up wide
1 car 4/4 1s and 2s Red Oak, 10 & 12' long, 16" & up wide
1 car 4/4 Common and Better Quarter Sawed Red Oak.
4 cars each 5/4, 6/4 and 8/4 No. 2 and S. W. Chestnut.
1 car 4/4 No. 1 Common Chestnut.
1 car 4/4 1s and 2s Chestnut.

Send Your Inquiries to

DANIEL B. CURLL, Real Estate Trust Bldg., PHILADELPHIA

PALMER & PARKER CO.

TEAK

MAHOGANY

EBONY

ENGLISH OAK

VENEERS

DOMESTIC

CIRCASSIAN WALNUT

HARDWOODS

103 Medford Street, Charlestown Dist.

BOSTON, MASS.

BEECHER & BARR

OAK

CHESTNUT

POPLAR

WHITE PINE, YELLOW PINE AND HEMLOCK
INTERIOR TRIM, HARDWOOD FLOORING.

442 LAND TITLE BLDG.

PHILADELPHIA, PA.

PROCTOR VENEER DRYER FIREPROOF

—AN—
UNPARALLELED SUCCESS

No
Splitting
Nor
Checking
No
Clogging
Nor
AdjustingRecom-
mended by
all those
who
have tried
itTHE PHILADELPHIA TEXTILE MACHINERY COMPANY
DEPT. L HANCOCK & SOMERSET STS. PHILA., PA.

If You Knew

What our BULLETIN SERVICE was doing
for your competitor in the lumber business, you'd
not only want the service yourself, but YOU'D
HAVE IT.

Let Us Tell You About It.

Hardwood Record :: Chicago

THE EAST

LEADING MANUFACTURERS AND JOBBERS

W. P. Craig Lumber Co.

Wholesale Hardwood and Building

Lumber

Empire Building, :: PITTSBURG, PA.

HARD MAPLE

When the quality of being hard is required in Maple, Vermont or Adirondack stock should be specified. Maple will not grow harder for us than other people, but it certainly does grow harder in this section of the country than elsewhere.

WE CAN MAKE PROMPT SHIPMENTS.

GEO. WEBSTER LUMBER CO.
21 Besse Place, Springfield, Mass.

WM. E. LITCHFIELD

MASON BUILDING, BOSTON, MASS.
Specialist in Hardwoods

Manufacturers are requested to supply lists of stock for sale

JONES HARDWOOD COMPANY

WHOLESALE DEALERS IN

HARDWOODS—Poplar and Gum

33 Broad Street, - - BOSTON, MASS.

Saw Mills Designed and Built

Plans and specifications prepared. Construction supervised. First class heavy millwright work. Entire plants surveyed. Machinery for complete mills. Fire loss adjustments. Practical sawmill engineer. Can save you money. Highest testimonials.

C. M. STEINMETZ, P. O. Box 83, Washington, D. C.

CHARLES HOLYOKE

141 MILK STREET, BOSTON, MASS.

HARDWOODS

J. & J. VINKE

Agents for the Sale of

AMERICAN HARDWOODS IN LUMBER AND LOGS

AMSTERDAM, HOLLAND

You can't afford to be without *The Gibson Tally Book*

when it costs but a dollar, if you want the most convenient and accurate system for tallying lumber.

Hardwood Record :: :: *Chicago*

R.E. Wood Lumber Company

☞ Manufacturers of Yellow Poplar, Oak, Chestnut, Hemlock and White Pine.

☞ We own our own stumpage and operate our own mills.

☞ Correspondence solicited and inquiries promptly answered.

**GENERAL OFFICES:
CONTINENTAL BUILDING.**

Baltimore, Maryland

2 cars 4/4 No. 1 Com. P. W. Oak.	2 cars 6/4 No. 1 Common Poplar.
1 car 4/4 FAS W. Oak.	8 cars 8/4 No. 1 Common Poplar.
1 car 6/4 No. 1 Com. W. Oak.	3 cars 10/4 No. 1 Common Poplar.
1 car 8/4 No. 1 Com. W. Oak.	2 cars 12/4 No. 1 Common Poplar.
3 cars 6/4 No. 1 Com. P. R. Oak.	1 car 4/4 Saps & Selects Poplar.
2 cars 8/4 No. 1 Com. R. Oak.	3 cars 8/4 Saps & Selects Poplar.
5 cars 5/4 No. 1 Common Poplar.	

The above stock can be shipped immediately
Write for prices to nearest office

FAUST BROTHERS LUMBER COMPANY

Sales Office
1819 Fisher Bldg., CHICAGO

Main Office
PADUCAH, KENTUCKY

FIRE INSURANCE

Lumber Underwriters

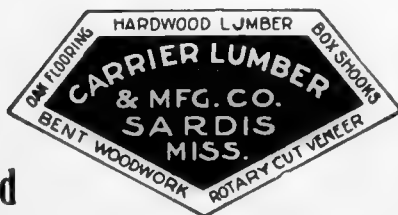
66 BROADWAY
NEW YORK

M. F. PERRY, Manager.

OAK FLOORING

Kiln-
Dried

Polished



Hollow
Backed
and
Bundled

Panel and No. 1 Poplar

5 cars 4/4" 18/23"

5 cars 4/4" 24" and up

Let Us Have Your Inquiries

RUSSE & BURGESS, Inc.
Memphis, Tennessee



Table of Contents



COVER PICTURE:	Page
Clearing Cut-Over Lands with Machinery	15
REVIEW AND OUTLOOK:	
General Market Conditions	15
Flood Situation in the South	15
Relative Demands for Hardwoods, 1913	16
Clearing Logged-Off Lands	16
Car Surplus and Shortage January 15	16
Expert Advice on Journal Advertising	17
Lumber Trade in Great Britain	17
State Rights Again	18
Forestry in the Philippines	18
CARTOON:	
Ancient History	19
AMERICAN FOREST TREES:	
California Laurel	20
SPECIAL ARTICLES:	
Allowing for Center Rot in Logs	21
Sap's Relation to Properties of Wood	22
Timber Resources of Canada	23
Hardwood Conditions Abroad During 1912	24
Hardwood for Interior Decoration	26
New Process for Making Sugar	27
Qualities of Water-Soaked Wood	28
Flagstaffs for Railroad Men	29
Freight Rates and Hardwood Prices	29
What is a Fair Profit on Lumber	32
Distinguishing Between the Gums	33
Traffic Matters in Memphis Territory	35
LUMBER ASSOCIATION MEETINGS:	
Annual Indiana Hardwood Lumbermen's Association	25
Annual Chicago Lumbermen's Association	30-31
Mid-Winter Meeting Michigan Hardwood Mfrs. Assn.	34
Miscellaneous	36-38
THE MAIL BAG	36
NEWS MISCELLANY	36-41
HARDWOOD NEWS NOTES	42-47
HARDWOOD MARKET	47-51

SUBSCRIPTION TERMS: In the United States and its possessions, and Canada, \$2.00 the year; in foreign countries, \$1.00 extra postage.

In conformity with the rules of the postoffice department, subscriptions are payable in advance, and in default of written orders to the contrary, are continued at our option.

Instructions for renewal, discontinuance, or change of address, should be sent one week before the date they are to go into effect. Both old and new addresses must be given.

Both display and classified advertising rates furnished upon application. Advertising copy must be received five days in advance of publication dates.

Entered as second-class matter May 26, 1902, at the postoffice at Chicago, Ill., under act of March 3, 1879.

ICHABOD T. WILLIAMS & SONS

**Foreign and Domestic Woods
In Logs, Lumber and Veneers**

11th Ave. and 25th Street
NEW YORK

910 So. Michigan Avenue
CHICAGO



Hardwood Record



Published in the Interest of the American Hardwood Forests, the Products thereof, and Logging, Saw Mill and Wood-Working Machinery, on the 10th and 25th of each Month, by

THE HARDWOOD COMPANY

Henry H. Gibson, Editor and Manager
Edwin W. Meeker } Associate Editors
Hu Maxwell }

Entire Seventh Floor Ellsworth Building
537 So. Dearborn Street, CHICAGO
Telephones: Harrison 8086-8087-8088

Vol. XXXV

CHICAGO, JANUARY 25, 1913

No. 7



Review and Outlook



General Market Conditions

In telling of hardwood conditions throughout the whole of the hardwood producing field, one needs go no further than to say that the buyers, who are everywhere evident where there is any lumber to be taken up, do not ask, in looking for stock: "What is the price?" but put the question rather: "Can you deliver the stock?"

This is the greatest concern of the shippers and receivers of hardwood lumber, and there is every reason to believe that this will continue to be the paramount consideration for several months in the future. If steadily increasing demand or abnormal shortage of stock alone featured the hardwood trade, it would be safe to predict that there would be an accumulation of stock within a few months, but with both these conditions decidedly manifest, the situation assumes a different aspect. Hardwoods are scarce—decidedly so.

Plain red oak continues to be the shortest of all the staple items in hardwood, with plain white oak a close second.

From the gum producing territory comes word that the slight recession in demand for red gum, which has been felt up to within a short time ago, has been checked and this wood is again coming back strongly. Sap gum is finding increasing favor in the eyes of the consuming trade in various lines, and is today one of the strongest items in the hardwood field.

Quartered oak continues to show increasing vitality. Values have jumped during the last three months an average of between three and four dollars a thousand. One concern, whose plants are in Missouri, and which makes a specialty of high-grade quartered oak in large quantities, says that three dollars is a conservative estimate of the advances in this stock in the last three months, but this is only in keeping with the increased demand and firmer values that have marked the entire trade.

Flood conditions have somewhat affected shipments, although only temporarily, but the same conditions have resulted in extremely wet logging which will probably be another factor in operating to prevent any abnormal production of hardwood stock in the South during the early spring months.

All the northern mills are operating on full scale, but the continued active demand and the shortage which has marked northern stocks for some time will absolutely prevent undue piling up of stock at northern points. Reports from Michigan points indicate that stock of all hardwoods and even hemlock on hand is more than fifty per cent less than for January 1, 1912, and much of this is already sold.

The Flood Situation in the South

Unusually heavy rains throughout practically the entire territory east of the Mississippi river during the last few weeks have resulted in an unusual amount of water passing through the Mississippi and its various tributaries. The section which experienced the most severe flood conditions was that lying along the Ohio river. It cannot be said, however, that as far as the lumber business is concerned, any serious hardship in the matter of flooded plants has been experienced, although in a number of cases plants have been inundated to a considerable depth. This condition is not generally true, however. The main difficulty has resulted from the interruption and in some cases the absolute suspension of traffic because of the inundated state of tracks and terminals. This has tied up business rather effectively in some quarters and while it has not resulted in any huge loss directly, it has effected considerable inconvenience to a great many members of the trade.

In the Memphis and Arkansas territory no great anxiety was felt during the height of the flood period. The Mississippi at that point reached a stage of about thirty-eight feet. This is three feet beyond the danger line and as a result lands outside of the levee district were overflowed to quite an extent. No great damage was done, however, as where valuable stock was in a threatened position, the owners had time to remove it. Some of the yards experienced pretty wet conditions and a few of the plants were shut down on account of high water.

At Cincinnati the chief trouble was encountered in making shipments, on account of extensive rains which washed out bridges and tracks, and made freight handling extremely difficult. Two or three plants in the hardwood, veneer and similar lines were flooded entirely, while in other cases high water made it extremely difficult to operate in the vicinity of the plants and they were shut down temporarily. No great damage was done, however, in any case, and the loss in lumber is practically negligible.

At Louisville, on what is known as "the Point," several concerns were forced to shut down because of flooded plants, but no great loss was experienced. As at Cincinnati, the greatest hardship resulted from the inability to make shipments on orders. In some cases considerable quantities of high-grade stock were threatened by the rising waters, but it was possible to remove the stock to safer quarters in time to prevent its being flooded. For the most part, valuable machinery that would have been affected by inundation was removed in time to prevent damage.

In the Ashland district very little damage was inflicted upon

the lumber business. Here, as in other points, sufficient warning was given to enable the lumbermen to remove their stocks to high points; hence the loss by lumber carried away or degraded was practically nothing.

The Cumberland river caused considerable damage at Nashville, where quite a quantity of logs, lumber and similar products were carried away by the floods. Several of the yards were inundated, but not to the extent that any great loss would be sustained on account of degraded stock.

The improved condition of the levees at Cairo which resulted was effected after the previous flood conditions, had the effect of preventing entirely the flooding of the lumber territory in Cairo and adjacent points. No anxiety was felt during the flood stage, as every confidence was felt in the ability of the strengthened levees to withstand the flood pressure.

Reviewing the whole situation as far as the effect of the unusual rains and resulting floods on the hardwood business, there seems to have been relatively small damage done directly to stock or to plants. Ample warning in most cases gave plenty of time to remove lumber and machinery. When the railroads have straightened out their lines and reconstructed washed out bridges and tracks, the ill effects of the flood condition will have become a thing of the past.

Relative Demands for Hardwoods for 1913

For over five years HARDWOOD RECORD has been engaged in carefully collecting and tabulating information showing the specific requirements of the wholesale hardwood buyers. This information has been gathered directly from the consumers of hardwood and is collected as a part of the vast amount of information made available to the patrons of HARDWOOD RECORD. The service is growing rapidly and with the purpose of keeping it up-to-date, every concern listed is either written or called upon personally once a year, and from each one is secured a notation of any changes regarding the article manufactured, the personnel of the company, and the proposed consumption for the ensuing year.

HARDWOOD RECORD is now engaged in compiling such a correction bulletin, revising the whole of this service up-to-date. This information will be issued in pamphlet form in the course of two or three weeks. Thus the whole of this service will be made doubly valuable and available for quotations on stocks which will be in most active demand during the coming year.

While this service was created primarily with the idea of maintaining a bureau of detailed information, it is natural that in course of collecting such data, it is possible to make observations as to the probable tendency of the hardwood consuming trade regarding the various woods of importance during the coming year. Inasmuch as the new bulletin will involve over one hundred pages of changes it is very apparent that the demands of the consuming trade during 1913 will be materially different from those of 1912. One of the most notable changes in requirements as seen from a careful perusal of the letters received from these consuming factories, is the remarkable development in the demand for sap gum. The increasing favor of this wood is not limited to any one line, but seems to have found a favorable introduction in a great many lines of consumption. In furniture, molding manufacture, manufacture of picture frames, manufacture of ladders, chairs and in many other lines, sap gum is noted as being one of the strongest woods in demand for the coming year. The great scarcity of maple during the past few months has in some instances resulted in the replacing of this wood with sap gum. The two woods are not closely similar in physical structure, but manufacturers of furniture, molding and kindred lines seem to have found it an acceptable wood for their purposes.

Mahogany and birch have both shown marked increase in demand and consumption as seen in reports referred to. Several concerns report an additional consumption of oak flooring and reduction in consumption of maple.

Summarizing, the features which will characterize 1913 business,

which seem most evident in an analysis of the bulletin information, are a greatly increased demand for sap gum, a material increase in the use of birch, steady increase in oak, both plain and quartered, in keeping with the normal increase of demand for all hardwoods.

Clearing Logged Off Lands

The picture on the cover of this issue of HARDWOOD RECORD illustrates an operation which is becoming familiar in many regions where extensive lumber operations are carried on. It shows how loggers are being followed up by land clearers. The illustration shows one of the powerful machines, made by the Clyde Iron Works of Duluth, Minn., at work on cut-over land, piling the tree tops, defective trunks, and other debris, and making the land ready for the plow. This shows the second step in the operation of converting forests into fields. The first step consists in taking out all the merchantable timber and delivering the logs to the sawmill; the second is taken when the refuse is piled ready for the fire which later burns the heaps and completes the clearing of the land.

This matter has received much attention in recent years in the North and South, and likewise in the Far West. The demand for agricultural land is so strong that the farmer now follows the lumberman much closer than formerly. The most serious problem now is to clear the land. When loggers have done with it, the ground is generally strewn with limbs, logs and trash that must be removed.

The old plan of clearing land, followed in the days of the pioneer, was to have log rollings, when all the neighbors were called together, and with a day of frolic and hard work a couple of acres were made ready for the plow. That method is too slow now, and, besides, it is out of fashion. The man who owns woodland or cut-over land that needs clearing, does it himself with the assistance of hired help.

Powerful machines have been made especially for that purpose. Some pile logs, others pull stumps. Steam takes the place of muscle in the hard lifts. One machine, with a small working force, will do as much in a day as a large company of old time log rollers could do in a week.

Sometimes a company owns the machine and clears by contract; sometimes the owner of large tracts clears the land and makes his money by selling it ready for the plow; and sometimes a number of small owners join together and buy a machine which clears land for all the owners, and then take contracts of clearing land for others.

The business has grown to large proportions. Thousands of acres of cut-over land are given yearly to the plow in various parts of the country.

In addition to the benefit to farmers in thus securing fresh land at very moderate prices, timber owners are also benefited. Every acre of cut-over land that is cleared lessens the fire risk in adjacent timber tracts because land, covered with offal of an inflammable nature, constitutes a veritable fire trap. Cleared fields are isles of safety in forested regions. The quicker the land can be cleared after the loggers pass on, the less food there is for fire, and the less menace to neighboring wooded tracts that are still uncut.

Car Surplus and Shortage January 15

A statement from the American Railway Association dated January 22 gives an interesting comparative summary of car surplus and shortage from October 11, 1911, and gives also a statement of car conditions up to January 15, 1913. The car statistics are compiled in detail by groups under which are noted the various states in each group. The number of roads under each group are compiled statistically, showing the surplus and shortages in each type of car. A comparison of surpluses and shortages in chart form is also given.

A summary of car surpluses and shortages from October 11, 1911, to January 15, 1913, shows that the total surplus January 15

was 53,230 cars; December 31, 1912, 50,650 cars; January 17, 1913, 102,479 cars. The total shortage for the same respective dates was 24,791, 33,601, and 12,194. From these figures it can be readily seen that the car situation was somewhat improved. The difficulties of securing cars during the last few months are also very graphically shown by the comparative figures.

Compared with the preceding period, it is shown that from October 11, 1911, to January 15, 1913, there was an increase in the total surplus of 2,571 cars. There was also a decrease in the surplus of coal cars amounting to 4,672.

In total shortage, the period denoted shows a decrease over the preceding period of 8,810 cars, while January 15, 1913, showed decrease of total surplus as compared with the same date for 1912 of 49,249.

Expert Advice on Journal Advertising

On any specific question bearing on any phase of modern business, the up-to-date business man concedes the value of expert opinion. He employs lawyers to give expert advice in legal matters; he has traffic men to handle his traffic matters in an expert manner and in various other departments of his business he counts on the advice of the coterie of experts whose services are available. It is to be hoped that eventually the average lumberman will realize the possibilities of strengthening his sales system through a well thought-out and not too restricted campaign of trade paper advertising. But it is evident that in order to arrive at any satisfactory method of procedure in this matter the lumberman of today must necessarily have expert advice on this question. After employing such advice, the first thing he wishes to learn is something about the character of the mediums he should employ for exploiting his goods through the trade press. On this score the reflections of the editor of a paper devoted to advertising and selling covering questions and answers which have particular bearing on trade paper advertising should be of value.

The questions were propounded at a recent meeting of the Technical Publicity Association and the answers as compiled showed the consensus of opinion of the members in attendance. One of the questions was as to whether an advertiser with a limited appropriation should carry a small space in several publications or pick out one or two particularly adapted to his line and concentrate on them. To this twenty answered that they preferred to concentrate on one or two publications.

A second question raised the issue as to whether the weekly or monthly journal is the more effective in the same field. Twelve of those in attendance stated that they would prefer carrying advertising in the monthly publication, while only five showed that they preferred the weekly.

One of the members suggested that in some fields there are certain papers whose circulation is restricted to a single phase of work in that field. It is therefore limited in quantity but select in character. Seven of the members in attendance preferred advertising in such a publication rather than in the general publication which was endorsed by only two.

By vote of twenty to one, the convention expressed its non-belief in the value of anniversary, convention, souvenir and other

special issues, preferring to spend their appropriations in regular issues of the same periodical. It was found to be the expressed belief of these experts in advertising and trade journal work that advertisers should have personal acquaintance with the editors of technical and trade publications.

Lumber Trade in Great Britain

United States Commercial Agent E. P. Secker has made a report covering various phases of the lumber trade in Great Britain. It is shown that a shipper in the United States usually contracts to deliver to a merchant in that country, within a specified time, certain lumber of a particular grade and specification at a given price at particular port or ports. The transaction is conducted through an agent, but there are some variations from this course. Some shippers have direct dealings with consumers; some merchants eliminate the agent and deal with the shipper; while agents have attempted to do business direct with the consumers. There are certain limitations to direct dealings between producer and consumer, and they are perhaps more evident in the lumber business than in most other lines.

Lumber merchants in Great Britain frequently have cause for complaint against shippers in the matter of nonfulfillment of contracts. Some shippers ignore their obligations when market prices rise during the currency of contracts, and when prices fall make shipment in excess of those called for. Another cause of complaint is delay and irregularity in shipments. The question of consignments is of paramount importance. Consignments always make for lower prices more than the keenness and business sagacity of buyers and all other forces combined. To illustrate, let it be supposed that contracts have been made, say, at \$40. In due time the lumber arrives and in the same steamer there are consignment parcels of similar grade. Obviously the market price is \$40, but the quantity arriving in addition to the contract goods is more than the market can absorb. The result is that lower

prices must be accepted in order to clear the surplus. Merchants who have to face the prospect of loss on their contract goods are in an unenviable position. They, of course, can buy the consignment parcels, but even working on an average cost this puts them at a distinct disadvantage as compared with competitors who deal mainly in consignments. It frequently happens that, should merchants decide to absorb the arrivals of consignments for a time at prices which look cheap, they find further quantities arriving and prices go down again.

Hardwood lumber, especially the better qualities, is used more freely in London than in any other port. Quarter-sawn oak meets with severe competition from wainscot, Odessa, and other kinds. Ash, too, meets Hungarian competition to some extent. There is a good market for No. 1 and No. 2 common lumber for cheap furniture, and the demand is capable of expansion if properly catered for. Generally speaking, log timber is not much sought by buyers, consequently wood in this form is not sold to advantage apart from the limited demand that exists. Storage of lumber at the docks is somewhat expensive, and on this account regular shipments are desirable.

Liverpool is undoubtedly the best port for local business and

*The Hardwood
Manufacturers' Association of
the United States
cordially invites everyone interested in the
production, merchandizing and con-
sumption of hardwood lumber
to be present at its
Tenth Annual Convention
to be held at
Hotel Sinton, Cincinnati, O.
Tuesday and Wednesday, February Four and Five
Nineteen Hundred and Thirteen
W. E. DeLaney Lewis Doster
PRESIDENT SECRETARY*

by far the best for transshipment purposes, both coastwise and abroad. Lumber is often seen on the quays which has arrived in transit to such far distant countries as South Africa, Australia, and New Zealand; a fair volume also passes through to various places on the continent of Europe. Liverpool is pre-eminently the importing center for wagon oak planks and scantlings. It is probably of more importance to American shippers than all other ports in Great Britain combined. Liverpool is a cheap port in which to handle or store timber, and its location makes it an advantageous market for both buying and selling wood goods of all kinds.

The lumber trade in Manchester is conducted by local firms, and also by Liverpool merchants. Most of the wood imported consists of softwoods from Canada and the Baltic, but there is a growing trade in hardwoods.

All kinds of lumber suitable for shipbuilding finds a ready and fairly steady sale in Glasgow. It is a place that favors log timber rather than lumber. In the south and east of Scotland there are numerous cabinet makers who specialize in the making of furniture, mainly for the London trade.

The trade of Belfast, Dublin, and the Bristol channel ports is partly done by direct and transit shipments and partly by Liverpool and London firms.

There is now a much better relationship between merchants and shippers of wagon stock, and the latter should give every care and attention to grading. Quarter-sawn white oak is meeting competition from Japanese timber. Quarter-sawn red oak has anything but a promising outlook. The outlook for thin and plain stock is good. Coffin planks are slowly but surely giving place to red coffin boards. Square and round American logs appear to be giving way to cut stuff.

Yellow poplar at moderate prices usually holds the field against all competitors. Northern-grown wood sells best, but the recent improvements in the manufacture and grading of the southern product has resulted in higher prices for the latter, provided the stock is free from black stain in the heartwood. In this, as with most woods, the tendency is to import sawn and otherwise manufactured boards rather than logs. Cottonwood, tupelo and magnolia are competitors, but can only be sold as such at low prices.

The importation of ash and hickory, used mainly for coach building and bending purposes, is chiefly in the round log. Red gum logs are seldom seen. The demand for red gum lumber is steady. This wood and the lower grades of oak and walnut supply practically all the requirements of the cheap-furniture trade. Sap gum (hazel pine) for coffin bottoms is a favorite. Black walnut logs find a ready sale. Skating-rink floors laid with maple have proved an excellent advertisement. Now architects are insisting on it for schools, public buildings, private mansions, and mills.

Shippers should exercise more care in grading lumber. Complaints are also heard as to disregard of details on the part of shippers, which is annoying to both merchants and consumers. The matter of bundling is of vital importance and shippers should give consideration to the views of merchants as to the best materials and methods. The condition of the lumber when it is delivered at final port of discharge is the best criterion by which to judge the value of the different methods, and it is the merchant, not the shipper, who is in position to pass judgment on the efficacy of the bundling methods employed.

Shippers should also give more heed to the wishes of buyers as regards marks. There is always a valid reason for including in the contract a stipulation that goods shall bear a certain mark or the buyer would not take the trouble to insist upon it. Cleating the ends of thin stock with wood is another detail which is often disregarded and to which more attention should be given.

State's Rights Again

The doctrine of state's rights has figured in the history of this country in many ways and during a long period, but the latest effort to apply it comes from a new quarter. It is in the form of an attack upon the government, particularly upon the Forest

Service, on account of its policy of closing the avenues by which large companies and corporations formerly came into possession of valuable timber areas, mining districts, and water power sites, without duly considering the public interest. A change has taken place in recent years. When the western timber lands were turned over to the Forest Service for administration, they were held for development, not exploitation. Attempts to gain control of valuable resources, by the old methods, failed. Then began attacks for the purpose of breaking down the policy, discrediting it, and opening the old avenues again. These assaults have continued several years, and have failed to accomplish what was intended. The latest turn has been an appeal to state's rights. The doctrine is now advanced that those resources, the timber, pasture, water power, and minerals, belong to the states in which they happen to lie, and that the government should turn them over to the states.

The purposes back of this demand are not difficult to fathom. Those who have endeavored to secure control of these enormous sources of wealth, which belong to the whole people, have not succeeded. Between them and what they wanted stood the Forest Service. Their attempts were hindered, blocked and defeated by that branch of the government into whose keeping the resources have been placed. This explains the demand that those resources be taken out of the Forest Service's hands and given to the respective states. The powers that have been trying to get hold of them believe that better success will attend their efforts if they are permitted to deal with state legislatures.

They doubtless know what they want. More than one state legislature has been captured in the past. With the government out of the way, the chances of getting control of resources of great value will increase and the corporations which are grabbing for those resources know it. Hence the sudden agitation of the state's rights doctrine in certain quarters. The government should hold, administer, and take care of what it has, for the benefit of the people to whom it belongs, and when it parts with ownership of any of it, let the ownership go, as the laws specify it shall go, to small owners who want to use it, and not to states or to large corporations. A result of the adoption of this latter policy would mean unregulated grazing of the ranges, with a renewal of the stockmen's wars, and the securing of the best pasturage by the large owners, and the crowding out of the small; lax enforcement of mining laws, enabling promoters to fleece the public with wildcat mines, and acquire valuable timber under false pretenses; the rapid passing of large timber areas to private ownership, and thence to corporate ownership; the removal of cutting restrictions so that timber property could be stripped at once instead of developed on a basis of permanency; and the rapid settlement of lands without regard to their agricultural fitness, in order that railroads and other promoters may profit.

Forestry in the Philippines

The annual report of the Director of Forestry in the Philippine Islands for the year ending June 30, 1912, has been issued. It was prepared by W. F. Sherfese, who is acting director in the absence of Major George P. Aherns. The report deals principally with the business matters of the department, and not with the resources in detail. Some of the matters discussed are of interest to lumbermen in the United States.

More foresters who have had training in the United States seek work in the Philippines than can be employed. This is a change from conditions a few years ago, when it was difficult to induce competent foresters to go to the Philippines.

The islands now have a forest school of their own, and twelve students, educated in the school, are now in the service. It is the policy to employ natives in the forest work, as far as practicable.

Deforested land in the Philippines, or land which never had forests, aggregates 68,000 square miles; and one of the big problems to be worked out is, how to plant this large area in trees.

The Philippines are preparing an exhibit of their commercial woods for the Panama Exposition to be held in San Francisco two years hence.



Pert, Pertinent and Impertinent



A Minority

First Clerk: "How many of them are in your office?"

Second Clerk: "Oh, I should say about a third of them." *London Standard*

Tough Indeed

Employer: "I would like to see you going to get married."

Employer: "Sorry, but I'm not going to let you go."

A Tall Building

Laborer: "And have they tall buildings in America, Pat?"

Pat: "Tall buildings, yes. But the last one I worked on was so tall it took the stomachs to let the moon pass."

Kansas Diagnosis

An Emporia girl was complaining to her mother that she was not getting any better.

"Why don't you give him the medicine," the friend asked.

"I have," she replied, "but it hasn't done any good."

Emporia Gazette

Ancient History



Lumber Conventions Are Different Now

From the Lumbermen's Primer, published 1900. Drawing and text by Robert L. Stearns.

What is this?

This is the Head-quart-ers of a Lum-ber-man's con-ven-tion.

But don't they have a meet-ing?

Oh, yes, that is in prog-ress now up stairs some-where.

Do they all at-tend the meet-ing?

Bless your heart, no! No one goes but the of-fi-cers and a few oth-ers that wan-der in by mis-take.

What do they do at the meet-ing?

Oh, they read the min-utes of the last meet-ing, for which no-body cares a "dam," some-one reads a ninety-eight page ar-ti-cle on the Har-mo-ny ex-ist-ing be-tween Man-u-fac-tur-er and Job-ber; then they wake up, the of-fi-cers re-e-lect themselves, vote the meet-ing the most en-thu-si-ast-ic ever held and adjourn.

I think I should like to go to a con-ven-tion.

Of course, we all do.

American Forest Trees

ONE HUNDRED-FOURTH PAPER

CALIFORNIA LAUREL

(*Umbellularia Californica* Nutt.)

This tree's range lies in southern Oregon and in California. It is a member of the laurel family and is closely related to the eastern sassafras and the red and the swamp bays of the southern states; but it is not near kin to the eastern laurels which, strange as it may appear, do not belong to the laurel family, notwithstanding the names they bear.

The people of California and Oregon have several names for this interesting tree. It is known as mountain laurel, California bay tree, myrtle tree, cajeput, California olive, spice tree, laurel, bay tree, ovedaphne, and California sassafras.

Those who call it laurel name it on account of its large, lustrous, thick leaves which adhere to the branches from two to six years. All new leaves do not come at once, as with most trees, but appear a few at a time during the whole summer.

The names which connect this tree with sassafras, spice and cajeput are based on odor and taste. All members of the laurel

and the constant appearance of young leaves on the lengthening shoots. It can stand an almost unlimited amount of shade itself, and is by no means backward in giving abundance of shade to small growth which is trying to struggle up to light from below. It delights in dense thickets, but it prefers thickets of its own species.

Its fruiting habits and its disposition to pre-empt the damp, rich soil along the banks of small water courses, are responsible for the thick stands. The fruit itself is an interesting thing. It is yellowish-green in color, as large as a good-sized olive, and looks much like it. Each drupe contains one seed. The fruit ripens in October, and falls in time to get the benefit of the autumn rains which visit the Pacific coast. Since the trees generally grow along gulches, the fruit falls and rolls to the bottom. The first dashing rain sends a flood down the gulches, the laurel drupes are carried along and are buried in mud wherever they can find a resting place. Germination



CALIFORNIA LAUREL. MUIR WOODS, NEAR SAN FRANCISCO

family in this country are characterized by pungent, aromatic odor and taste, and the one under consideration shares these properties in a remarkable degree. When the leaves and the green bark are crushed, they give off a light, volatile oil in folicles which float in the air, like those of an onion, and when inhaled it produces severe pain over the eyes, and may induce dizziness and violent sneezing. Though the symptoms are alarming to one who is undergoing the experience for the first time, no serious inconvenience follows. Dried leaves are capable of producing a similar effect but with less violence. The California laurel's close relationship to the camphor tree is readily believed by persons who inhale some of the oily spray from the crushed leaves.

Attempts have been made to produce the commercial oil of cajeput, or a substitute for it, by distilling the leaves and bark of this laurel. A passable substitute has been manufactured, but it cannot be marketed as the genuine article. By distilling the fruit a product known as umbellulic acid has been obtained.

The California laurel carries a very dense crown of leaves. This is due partly to the old crops which hang so long, and to the tree's habit of lengthening its leading shoots during the growing season,

takes place soon after. The fruit remains under the mud, attached to the roots of the young plants, until the following summer.

The result is that if a laurel gets a foothold in a gulch through which water occasionally flows, lines of young laurels will eventually cover the banks of the gulch as far down stream as conditions are favorable.

The wood of California laurel weighs 40.60 pounds per cubic foot when kiln-dried. That is nine pounds heavier than sassafras. It is very heavy when green and sinks when placed in water. It is hard and very firm, rich yellowish brown in color, often beautifully mottled; but this applies to the heartwood only, and not to the thick sapwood.

Lumbermen have discovered that the wood's color can be materially changed by immersing the logs when green, and leaving them submerged a long time. The beautiful "black myrtle," which has been so much admired, is nothing more than California laurel which has undergone the cold water treatment.

The annual rings of growth are clearly marked by dark bands of summerwood. The rings are often wide, but not always, for sometimes the growth is very slow. The wood is diffuse porous, and

the pores are small and not numerous. The wood's figure is brought out best by tangential sawing, as is the case with so many woods which have clearly-marked rings but small and obscure medullary rays. Figure is not uniform; that is, one trunk may produce a pattern quite different from another. The figure of some logs is particularly beautiful; these logs are selected for special purposes. Sudworth says that none of our hardwoods excels it in beautiful grain when finished, and Sargent is still more emphatic when he declares that it is "the most valuable wood produced in the forests of Pacific North America for interior finish of houses and for furniture."

The wood of this tree has more than ninety per cent of the strength of white oak, is considerably stiffer, and contains a smaller amount of ash, weight for weight of wood. The species reaches its best development in the rich valleys of southwestern Oregon, where, with the broadleaf maple, it forms a considerable part of the forest growth. The largest trees are sixty to eighty feet high, and from two to four in diameter. In crowded stands the trunks are shapely, and often measure thirty or forty feet to the first limbs; but more commonly the trunk is short.

The boat yards in southwestern Oregon were the first to use California laurel for commercial purposes, but early settlers made a point of procuring it for fuel when they could. The oil in the wood causes it to burn with a cheerful blaze, and campers in the mountains consider themselves fortunate when they find a supply for the evening bonfire.

Shipbuilders have drawn upon this wood for fifty years for ma-



LEAF AND FRUIT OF CALIFORNIA
LAUREL

terial. It is made into pilot wheels, interior finish, cleats, cross-ties, and sometimes deck planking. Furniture makers long ago made a specialty of the wood for their San Francisco trade. For thirty years travelers admired the superb furniture of the Palace hotel in that city, and wondered of what wood it was made. It was the California laurel. The hotel's furniture was hand-made, or largely so, at a time when wood-working factories were few on the Pacific coast. The furniture was finally destroyed in the San Francisco earthquake. Furniture is still one of the products made of the wood, but the quantity is small. Other products are interior finish; fixtures for banks, stores and offices; musical instru-

ments, including organs; mathematical instruments, and carpenters' tools, including rulers, straight-edges, spirit levels, bench screws and clamps, and handles of many kinds.

Makers of novelties and small turnery find it serviceable for paper knives, pin trays, matchesafes, brush backs, and many articles of like kind. One of the largest uses for it is as walking beams for pumping oilwells in central and southern California. The beauty of grain has nothing to do with this use.

Country blacksmiths repair wagons and agricultural implements with this wood. Farmers have long employed it about their premises for posts, gates, floors, and building material. Cooks flavor soup with the leaves, and poultrymen make henroosts of poles, believing that the wood's odor will keep insects away. This is probably the old sassafras superstition carried west by early California settlers.

Allowing for Center Rot in Logs

In scaling logs there are a great many different ways of allowing for uniform center or circular rot. For example:

1. Subtract from the actual diameter the diameter of the rotten core and assume the remainder to be the true diameter for scaling.

2. Subtract from the full scale of the log the scale for the rotten core and assume the remainder to be the true scale.

3. Add 3 inches to the diameter of the defect, square the sum and deduct the result from the full scale of the log.

4. "For uniform defect or 3 inches or less in diameter deduct 10 feet b. m. in logs up to 16 feet in length. For defect 4 to 6 inches in diameter add 3 inches to actual diameter of rot, and deduct from full scale of the log an amount equal to the contents of a log of resultant diameter. For defect 7 to 12 inches in diameter add 4 inches to diameter of rot and deduct an amount equal to the contents of a log of the resultant diameter from full scale of log." (Forest Service's method.)

5. Another method is to note the length of log and the longest diameter of the defect, and determine the loss from a cull table. The defect is measured at the large end if it runs through the log or appears only at the large end; otherwise, at the small end. A table of this kind was prepared by H. D. Tiemann for all center defects in logs such as holes, cup-shake, and rot, which are 4 inches or more from the bark, and is as follows:

CULL TABLE									
Loss in board feet from holes near the center of logs.									
Diam. of hole, Inches,	Length of log in feet								
	10	12	14	16	18	20	22	24	
2	5	6	7	8	9	10	11	12	
3	9	11	13	15	17	18	20	21	
4	14	17	20	23	26	28	31	33	
5	20	24	28	32	36	40	44	48	
6	28	33	39	44	50	55	60	65	
7	36	43	50	57	65	72	78	85	
8	45	54	63	72	81	90	99	108	
9	56	67	78	89	100	112	122	133	
10	67	81	93	107	120	133	148	161	
11	80	96	112	128	144	160	176	192	

12	94	113	132	151	170	188	207	225
13	109	131	153	175	197	218	240	261
14	124	150	175	200	225	250	275	300
15	142	171	218	226	255	283	313	341

The wide variation in the results of these different methods can best be shown by taking a specified case. For example, assume a 12-foot log, 20 inches in diameter with a rotten core 6 inches in diameter. The allowances according to the several methods, using the Champlain rule which is one of the most accurate, are as follows:

No.	Loss in board feet.	Per cent of total.
1	122	52.8
2	17	7.3
3	81	35
4	42	18.1
5	33	14.2

There is abundant evidence that the use of a carefully constructed cull table such as given above is much more nearly accurate than any rule-of-thumb method. In the use of such a table it must be remembered that it makes an appreciable difference in the amount of loss actually sustained whether the defect is a hole or a rotten core. In sawing a hollow log the cavity must be left completely boxed-in to hold against the carriage dogs and prevent the saw breaking into the hole. In the other case the rotten core prevents the shell from collapsing so that it is possible to saw closer to the defect, thereby reducing the loss.—S. J. R.

Elm in New Role

The white or gray elm of Michigan is constantly enlarging its usefulness. One of the latest reported uses for it is in the manufacture of cigar boxes. It is stained red in imitation of cedar and is sometimes marketed as Michigan cedar. The wood, of course, lacks the characteristic cedar odor, unless it is imparted artificially. The facility with which this elm receives stains makes it acceptable for many purposes where it is not used in its natural state.



Sap's Relation to Properties of Wood



It is quite universally accepted that the best time to cut hardwoods is in the winter. Wood so cut is believed to season better, to be more durable, and in every way more desirable where exacting service is demanded. Scientific investigations have demonstrated that there are at least partial grounds for such claims. It is when explanation is made that science and popular belief are no longer in harmony.

The popular notion is that during the winter the sap of a hardwood tree is down—probably in the roots. On this account the trunk and branches of a tree contain considerably less moisture in winter than spring and summer. Accordingly, wood cut “when the sap is down” will be comparatively dry to start with, and having reached this condition in the living tree much of the damage of seasoning in open air is avoided. Moreover, according to this theory, since it is fermentation of the sap which causes wood to rot, of course the best time to cut timber is when there is the least sap; that is, when the “sap is down.”

The trouble with these plausible theories is that they are based on false premises. In the first place there is more sap in a living tree in winter than in summer, and secondly, decay is not due to sap fermentation, but to the action of living organisms of which fungi are by far the most important.

It is easy to understand how the erroneous idea of the movement of sap was gained. In the early spring some trees, like the maple, bleed very freely when cut or tapped. Later, when the foliage is young, there is a mucilaginous layer just under the bark, and it is so soft and slippery that bark can be peeled off very readily at that season. This fact is taken advantage of in peeling logs, posts, poles and harvesting tanbark. The time to make a pawpaw whistle is, as everyone knows, “when the sap is up.” If the sap goes up in the spring, as seems quite evident, what is more natural than that it should go down in the fall and stay down all winter?

To understand the movement of sap, it is first necessary to know what sap is and where it comes from. Tree sap is water containing various substances in solution. The water is absorbed from the soil by the roots and makes its way upward through the sapwood of the tree to the leaves. It contains small quantities of mineral salts and in some species, as birch, maple and walnut, it also contains at certain times a small percentage of sugar and other organic matter. No satisfactory explanation can be made as to the real cause or causes of the rise of sap. The fact remains that water with small amounts of mineral salts in solution is taken in by the roots and passes upward through the vessels in the sapwood of hardwoods (through the tracheids of conifers) to the leaves, where most of it is breathed (transpired) out into the air. The mineral salts are left behind in the wood and leaves, and make up the ash when the material is burned.

But trees cannot live by water and mineral salts alone. Such materials are in no wise fitted to enter directly into the process of cell formation. Every plant needs starch. The machinery for making it is supplied by the green chlorophyll of the leaves, the energy by direct sunlight, and the raw materials are carbon dioxide from the air and hydrogen from the water the roots absorbed. In taking the hydrogen from the water (which is a compound of hydrogen and oxygen), oxygen is liberated. If one examines plants in an aquarium on a bright day it will be noticed that they are giving off little bubbles. These are of oxygen and serve to keep the water in condition for fish which breathe out carbon dioxide the plant needs, and inhale the oxygen the plant gives off. At night plants cannot make starch, since the power (sunlight) is shut off.

During the day each little grain of chlorophyll has been busy piling up starch all about it. During the night this material is converted into sugar which is soluble and carried away to the growing parts of the plant that need it. This is why plants grow more on warm nights than on warm days. The day is largely devoted to making food, the night to making tissue out of the food.

From the above, two things are evident. First, that there must be a continual movement of sap down as well as up, and second, that the sap containing the manufactured food is quite different in its consistency from that taken in by the roots. The two streams flow in different channels. That containing the elaborated food moves through the inner bark instead of through the wood. It is principally a downward flow, but may be in any direction as the demands of the different parts of the plant require.

Since the living wood cells need food the same as the other parts, some arrangement must be made for transferring the food sap from the bark. This is accomplished by means of the medullary rays which extend from the wood into the bark. These rays do more than transfer food; they store some of it over winter to be used in the spring before the leaves are out. This stored food is not in the soluble form of sugar, but in the insoluble form of starch. When there is need for supplies from these storehouses the starch is again converted into sugar which is dissolved in the sap of the sapwood. It is for this reason that the sap of the maple is so sweet in the early spring before the leaves open but not at other times.

From the foregoing it is evident that, so long as the leaves on a tree are active there must be a continuous movement of sap—quite rapidly upward through the wood and more slowly downward and otherwise through the inner bark and the rays. In the summer a tree is normally at its greatest activity, the absorption of water is most rapid and the giving off (or transpiration, as it is called) from the leaves is in proportion. A greater volume of water passes through the tree at this season, but less stays there. The greater the leaf surface exposed the greater the amount of water transpired. A thrifty maple fifteen inches in diameter and fifty feet high has been found to have a third of an acre of leaf surface. If the supply of moisture in the soil gets too low to supply the leaves they wilt. In some species the water content of a tree can be materially reduced by girdling or by allowing the leaves to dry on the peeled trees.

During the winter practically no transpiration occurs in deciduous trees, for there are no leaves. The roots, however, do not cease their activity, but continue to grow slowly and absorb water even in decidedly cold weather. With no chance to escape through the leaves, this water or sap accumulates so that, instead of there being less in a tree during winter than summer, there is appreciably more. The water content of trees is greatest in the spring just before the opening of the leaves. This is more noticeable in sapwood, of course, than in heartwood, as the latter is dead and no longer active in the transfer of sap. It does, however, respond in some degree to changes in the water content of sapwood.

Experiments made by the Vermont Agricultural Experiment Station showed the water content of sugar maples in summer to be between 26 and 27 per cent; in December it was 31.5 per cent; by the middle of March it was 36.5 per cent. The results of numerous experiments by the United States Forest Service indicate the same thing. For instance, the average weight of lodgepole pine ties of the same size cut at Bozeman, Mont., in June, 1902, was 157 pounds; in July, 144 pounds; in August, 150 pounds; in September, 157 pounds; in October, 164 pounds. Winter-cut chestnut poles cut at Dover, N. J., weighed more per cubic foot when green than other seasons' cuts. At Pisgah, N. C., 600 chestnut poles were weighed and the winter-cut was found to be considerably heavier than that cut at any other season, and, except in a single case, at no time did it reach the dryness of the other cuts.

Dr. Robert Hartig, a German investigator, made a careful study of thirty different species of trees practically all of the same age (sixteen years), which he grouped into three classes. He found, by eliminating as far as possible all variables other than the one under investigation, that the percentage of moisture contained in green wood varied materially with the season, as is shown in the following table:

	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Sept.	Nov.
Heavy hardwoods	1	28	36	36	39	35	39	38	
Light hardwoods	1	28	31	49	47	47	59	47	
Coniferous woods	40	28	34	54	69	60	60	48	48
Average of all	3	1	49	49	49	49	59	48	48

The reason bark peels so much easier in the spring is not that the "sap is up," but that the cambium layer is particularly active in the formation of new wood and new bark. Growth is rapid and the cells newly-formed have delicate, unthickened walls readily torn upon the slightest pressure. Later, growth slows down and thick-walled latewood is formed. Finally there is no growth at all during the resting period (winter) and the bark is tight.

What, then, are the advantages of winter felling of hardwood timber? If only the amount of moisture in the wood were considered, summer would appear the best cutting season. As a matter of fact the user of hardwood is little concerned with the actual or comparative amount of moisture in a tree when it is felled, and this in spite of his insistence that material must be cut in winter "when the sap is down." It is not the water in wood that causes trouble; it is getting it out. Winter-cut hardwood is preferred, not because of the moisture content at the time of felling, but largely because of the effect of the time of year on seasoning.

Seasoning is essentially drying. Dry wood differs from green wood in other ways than the mere loss of moisture. When wood dries the cell walls become thinner—they shrink—but a dry cell is practically as long as it was before. The structure of wood, especially that of the hardwoods, is so complex that when the elements composing it begin to shrink in different amounts and directions, severe strains occur. Wood is somewhat plastic—otherwise it would break into minute fragments upon drying. This plasticity will permit slow readjustments to the new sizes and shapes of the cells, but at best there will be some checking and warping, and this will be increased as the rate of drying or the irregularity of it increases. Coniferous woods are much simpler in structure than hardwoods and can be seasoned more rapidly without serious checking.

Loss of water from wood is wholly by evaporation from the surface. This is very largely influenced by the temperature, so that wood dries much more rapidly in summer than in winter. If seasoning proceeds too fast, checking and warping increase in geometric ratio. Hence hardwoods felled in winter season more slowly and uniformly than when cut at other seasons and for this reason the material will contain fewer checks, which, no matter how small, are a source of weakness.

But how is increased durability of winter-felled timber accounted for? There are several different problems involved. Insects and fungi, which occasion nearly all the damage to timber, are not active during cold weather. Consequently winter-cut material will have more or less time for seasoning (depending upon the time of cutting) before being subjected to infection. If the drying has proceeded far enough it may escape entirely. At any rate the chances of the material getting to the mill in a sound condition will be much greater.

When trees have completed the season's growth the layer of wood next the bark is denser and harder than would be the case if cut while in a growing condition. In the case of poles and round posts, this denser layer does not afford fungi as good a chance to lodge and grow as the undeveloped wood of the cambium layer.

The usual explanation of greater durability of winter-felled material is as follows: "The reason is found in the scantiness of easily decomposed chemical substances in the tissues of trees after the close of the vegetative period. The sap in the tree during winter consists almost entirely of water, and therefore does not offer a favorable medium for the development of micro-organisms. In summer, on the contrary, the sap contains albuminous and other chemically unstable substances which, under the influence of the high temperature of summer, readily ferment and favor the development of decay-producing micro-organisms." (Zon, R.: *Methods of determining the time of year when timber was cut. Forestry Quarterly, Vol. VII. 1909.*)

Assuming this statement to be correct, it could only apply to the sapwood. The sap in heartwood remains practically the same the

year round, for the cells are dead, have no need of food for themselves and have lost the power of storing it up or handling it any way. Since the sapwood of no native species is naturally durable when exposed to conditions favorable for decay, the prolongation of life due to winter felling would, at least, be slight.

If there were the differences in the composition of the sap that is claimed, then it should be possible by means of chemical analysis of a piece of wood to determine at what season it was felled. The most painstaking investigations of the question by competent German authorities have scored as many misses as hits. As a matter of fact, during the resting period of the tree there is more reserve food in the living wood than at any other time. The sap contains less in solution in early winter, but fungi should not, on that account, experience any difficulty in reaching the stored food. Again, many of the most destructive fungi live, not upon the sap or the cell contents, but on the cell walls—the wood substance itself. They will attack the sapwood of any tree regardless of the time of felling. That heartwood of any tree is always more durable than the sapwood is due to the presence in it of infiltrated substances, such as gums, resins, oils, pigments and tannins, which were not present in such quantities in the sapwood.

Another explanation of the alleged increased durability is as follows: "During the growing season the wood of trees contains sulphuric acid and potassium, both of which are solvents of carbohydrates, starch, resins and gums; they are known to soften also the ligneous tissue to a considerable degree. During the summer months the wood of living trees contains eight times as much sulphuric acid and five times as much potassium as it does during the winter months. The presence of these two chemical substances during the growing season constitutes the chief factor in dissolving the natural preservatives within the wood and in preparing the wood for the different kinds of wood-destroying fungi."

Even if this explanation is correct, which is more than doubtful, it could apply only to the relative durability of sapwood, which no one expects to last when exposed to conditions favorable for decay. And, after all, what creditable evidence is there that the season of felling alone affects appreciably the durability of wood?—S. J. R.

TIMBER RESOURCES OF CANADA

It is commonly stated that Canada is a woodland country, and this, as generally understood, means a timber country. Even the statement that Canada is a woodland country needs modification, according to Dr. B. E. Fernow, for at least one-third is treeless tundra, to which must be added the 200,000 square miles of prairie and plains country, the extensive areas above timber line, and a large proportion, perhaps one-half, of the northern woodland country, which is in swamps and muskegs or otherwise open. One should bear in mind, too, the unusually large areas of water surface represented in the innumerable lakes which stud the vast undulating interior plain.

A closer inspection of natural forest conditions of Canada reveals, first, that the country as a whole is poorly timbered; secondly, that the valuable timber is unevenly distributed; thirdly, that comparatively few species are represented in the forest; further, that within the forest areas farmlands are scanty and mostly poor, and wastelands—rock barrens, swamps, bogs and muskegs—plentiful. The country is vast, covering over three and a half million square miles, larger than the United States, and while there are endless woods, really good timber is limited, say 600,000,000,000 feet.

Of this amount of timber, half may be accredited to the Pacific and half to the Atlantic side. In addition, a large amount in the aggregate of pulpwood and of inferior saw material, needful for local development, is found scattered through the middle portion.

While an enumeration of species occurring in Canada would show a rather large total of 150, less than one-third are of commercial value, and, indeed, if frequency and quantity of occurrence are kept in mind as factors in determining economic importance, the number of important species will be found within thirty, namely, eighteen softwoods and twelve hardwoods.



Conditions Abroad During 1912



Reports are at hand from leading hardwood merchants operating in foreign countries, representing the sentiment as it applies to the year's business of 1912 in foreign countries. In speaking of the mahogany import during the year a Liverpool house states the amount brought in during that period was 21 per cent more than for 1911, and that the bulk of it, or specifically 88 per cent, came from the west coast of Africa. The average quality and size was similar to former imports, and throughout the year the various descriptions sold readily at high and advanced prices. The American demand absorbed a considerable portion of the African mahogany and most of the richly figured logs of veneer quality. Mexican stock maintained a firm condition throughout the year, and the moderate import which arrived at regular intervals was quickly turned over. Cuba contributed a considerable supply of mahogany to the Liverpool market during the past year, but the consumption of Cuban stock kept pace with the offerings. Supplies were sold mostly on arrival. The condition in Cuban stock now shows that quantities of Cuban mahogany are light compared with twelve months ago and values are appreciably higher. The same can be said of African stock.

There was but a moderate average import of American walnut logs throughout the year 1912, although figures showed a considerable advance over those of the previous year. The wood was chiefly of medium quality and of various dimensions. While the prices were generally steady, lower rates were in some cases accepted for small logs of common quality. There seemed to be a dearth of large, high-grade walnut logs offered. But the beginning of 1913 shows a light supply on hand with a good inquiry prevailing for high-grade logs of good dimensions. Manufactured American walnut arrived in moderate quantities and was readily disposed of at firm prices, which showed a constantly increasing tendency to become stronger.

In reviewing the timber trade of Glasgow for 1912 it is gratifying to note that on the whole a satisfactory year's trade resulted both as regards the volume of business and general conditions which prevailed. The year opened with an appreciable dullness which resulted from the great unrest which permeated the labor world, and the serious strikes which ensued. As soon as these things were disposed of, however, trade picked up rapidly and gradually assumed active proportions in many directions. Thus on the whole the figures for the year make a very favorable showing as compared with other recent years. The extensive demands for shipbuilding requirements marked the dominant feature of the situation. This industry absorbed large quantities of timber, particularly teak and pitch-pine.

Values without exception pursued an even course and substantial increases were recorded in many instances. These were chiefly noted in connection with woods feeling the rise in ocean freight rates. This factor was abetted by the moderation of imports together with the elimination of stocks on hand. In addition to shipbuilding other lines of wood consuming industries enjoyed marked prosperity, among these being wagon building, cabinet making and box making. House-building on the other hand has not been as active as it was anticipated it would be, and so far has shown little tendency to improve materially. The prospects, however, indicate that the situation within the next few months will appear somewhat brighter, although any improvements will undoubtedly be slow and gradual.

A fairly satisfactory situation prevailed in the oak market, although plain stock was in better request than quartered oak. In the plain oak No. 1 and No. 2 common in inch and 6/4 particularly, showed activity and unusually good prices. The consumption of firsts and seconds was considerably healthier owing to the high prices which finally obtained in those grades. The best movement of quartered oak occurred in firsts and seconds which commanded good prices, although other grades did not meet with any great response. Almost all of the import trade in

wagon planks was of contract shipments, but a few consigned parcels came forth and were disposed of fairly satisfactorily. A steady inquiry was in evidence for northern oak timber of good average diameter, and no difficulty was encountered in disposing of such shipments at normal prices. Southern woods were not inquired for in the Glasgow market, and consignments of this description should seemingly be avoided.

The import of poplar was of but moderate extent, although it was amply sufficient to meet the market's demand. The continued high prices which have prevailed, particularly on prime stock, have had the effect of diverting attention to other cheaper woods such as sap gum and Gaboon mahogany. The year showed a moderate average demand for the best quality of yellow poplar logs, although the inferior timber met with but little inquiry.

Arrivals of walnut lumber at the Glasgow market were trifling during the year, but were sufficient to meet the demand. But limited arrivals of walnut logs were noted and for the most part they were small and of inferior quality.

The Glasgow market for ash lumber improved somewhat during the year, and fair sales were noted, chiefly in No. 1 common in $\frac{1}{2}$, $\frac{3}{4}$ and 1 inch stock. Firsts and seconds in the same dimensions also sold well, but not in as large quantities as No. 1 common stock.

There is no stock of hickory logs on hand at the Glasgow market and buyers are experiencing some difficulty in filling their requirements. The supply of hickory has been moderate all through the year and prices have depreciated sharply during the closing months.

An increased demand has been noted for sap gum, and a good business has been transacted in both planed and unplanned lumber at generally firmer prices. The reduced consumption of red gum has followed an increased scale of prices. In some instances sap gum has been substituted. The year 1912 showed only a moderate business in red gum lumber.

Prime dressed boards of cottonwood, $\frac{7}{8}$ inch thick and 18 and up, and 21 and up wide, have been the only active grades in this wood.

The market at Hamburg, Germany, has maintained a healthy call for white oak. The imports of this stock, however, have not been much larger than during the year 1911, owing to the gradual rise in prices, and the difficulty of obtaining satisfactory shipping facilities.

A steady request was maintained for black walnut throughout the year and a rising scale of prices has been maintained from month to month. The better grades particularly enjoyed increasing values. As a result in many instances consumers who have heretofore bought the best grades of stock were compelled to take the lower grades during the past year. Owing to the scarcity of lumber shipments during the shipping season for active consignments, which were rather large during the latter part of the summer, stocks have been entirely consumed and at the close of the year stocks were found to be relatively light.

The Hamburg trade in mahogany was confined principally to a small quantity of high-grade Honduras and Tabasco stock. Prices which prevailed were so high that they prevented business on a larger scale.

Inasmuch as the Hamburg market buys its yellow poplar mainly in logs, but a small business was done in this wood during 1912. In cottonwood also the business was not what it might have been if shippers were not compelled by excessive freight rates to ask constantly rising prices. The imports therefore did not exceed those of previous years.

A limited demand for red gum was filled by consignment, which arrived occasionally during the year. Sap gum has been in good request, however, during the twelve months, an even level of prices on this line of stock being responsible for the steady inquiry.

The business in chestnut was rather limited and was done wholly on forward delivery prices, the demand being chiefly concentrated on the best grade of chestnut lumber.



Annual of Indiana Association



The Indiana Hardwood Lumbermen's Association met in its fourteenth annual convention at the Hotel Denison, Indianapolis, on January 16. There was an attendance of approximately one hundred. President Van B. Perrine, in opening the meeting with his address, stated that the Indiana association is really the father of all hardwood organizations and that its membership is closely interlocked with the membership of various other associations in the hardwood field. The purpose of the Indiana association, therefore, is not so much to work out the practical problems of the trade but to afford a means of getting together of the Indiana lumbermen once a year for social intercourse.

President Perrine referred to the pending reports of the various committees and then, speaking of inspection, said that present rules are quite satisfactory to the Indiana association; in fact it made little difference what rules were in force so long as they are uniform. He said further, however, that in order to get this uniformity, it would be necessary for Indiana lumbermen to use all their influence. He deplored the fact that there is a continued difference between the two associations on the inspection question and said that unification of existing inspection rules would not only mean greater success for all, but confidence all over the world where products of the members of the various hardwood associations of the United States are marketed.

Secretary C. H. Kramer compared present conditions with those existing a year ago. He stated that if it had not been for excessive rates in the early part of the year and the car shortage which has resulted in such hardship more lately, the cut and shipments during 1912 would undoubtedly have been the greatest in the history of the state. He said further that there was an excess of shipments over cut for 1912 of approximately five per cent and that this increase had resulted in a considerable advance in price. This advance, however, was also influenced to a degree by increased cost of stumpage and increased labor expense. The secretary, because of these facts, advised members of the association to employ every means whereby they would secure highest quality of production and at the same time operate on as low a cost basis as possible. He suggested that with present demand and shortage of lumber, increased activity in sawing will result, but advised against this necessity for restocking immediately having the effect of making members disregard quality of production. The secretary said that No. 2, 3, and 4 common stock has shown the greatest activity and the greatest advance in price. He also said that consumers are month by month showing greater willingness to take up odd length stock. Fourteen new members were approved by the board of manufacturers during the year and their names were presented to the association for ratification.

Speaking of car shortage, Secretary Kramer said that, while there is some noticeable improvement in the situation, there is, however, unnecessary time wasted on the part of the carriers in many cases in moving their cars from loading to receiving points. He said that this condition means the loss of considerable money in interest to the shippers and that a fair and sure way of remedying these conditions would be a reciprocal demurrage rule.

Mr. Kramer then referred to members of the association who have been signally honored during the past year,—namely, C. H. Barnaby of Greencastle, who last June was made president of the National Hardwood Lumber Association, and John M. Pritchard, who recently was elected president of the Memphis



VAN B. PERRINE, FORT WAYNE, IND. RE-
ELECTED PRESIDENT OF THE IN-
DIANA HARDWOOD LUMBERMEN'S
ASSOCIATION.

Lumbermen's Club.

Treasurer James Buckley, in submitting his report, said that there was a balance on hand from last year of \$7.08; the receipts for the year were \$585.65; disbursements, \$97.50; leaving a balance on hand of \$495.23.

Chairman W. W. Knight of the trade conditions committee spoke very optimistically of the business conditions which have prevailed during the last six months. He said that material reduction in hardwood stocks has been effected and that the market is undoubtedly in the seller's control. He predicted excellent business conditions for the next six months, with maintenance or slight increase in present values and continued demand for all kinds of lumber.

C. H. Barnaby, E. A. Swain and J. H. Stimson were appointed as a nominating committee to recommend officers for the coming year.

The inspection committee, through its chairman, J. M. Pritchard, reported that the bulk of its work has been with a view of endeavoring to secure uniformity of hardwood grades. Mr. Pritchard told of the

work of the rules committee of the National Hardwood Lumber Association and said that the members of that body would soon receive recommendations covering proposed changes in hardwood rules.

Discussion of railroad matters occupied the attention of the meeting during the afternoon. The members were addressed by E. M. Elliott, agent for the Union Line System of Indianapolis, who asked for closer interest between shippers and carriers.

"Interdependent Relationship of the Shippers and the Railroad in Service with Direct Relation to Demurrage Rules and Regulations" was the subject of a talk by W. M. Prall of Pittsburgh, superintendent of car service. The work of the Railway Commission of Indiana was reviewed by Judge Woods of Indianapolis, particularly regarding railroad regulations.

Chandler Coulter of the School of Science of Purdue University spoke on the subject of forestry and emphasized particularly conditions obtaining at hardwood operations. He pointed out what to the members were startling conditions regarding waste in converting the hardwood stumpage into lumber. He also reviewed the work of conserving the forest resources in Germany and France.

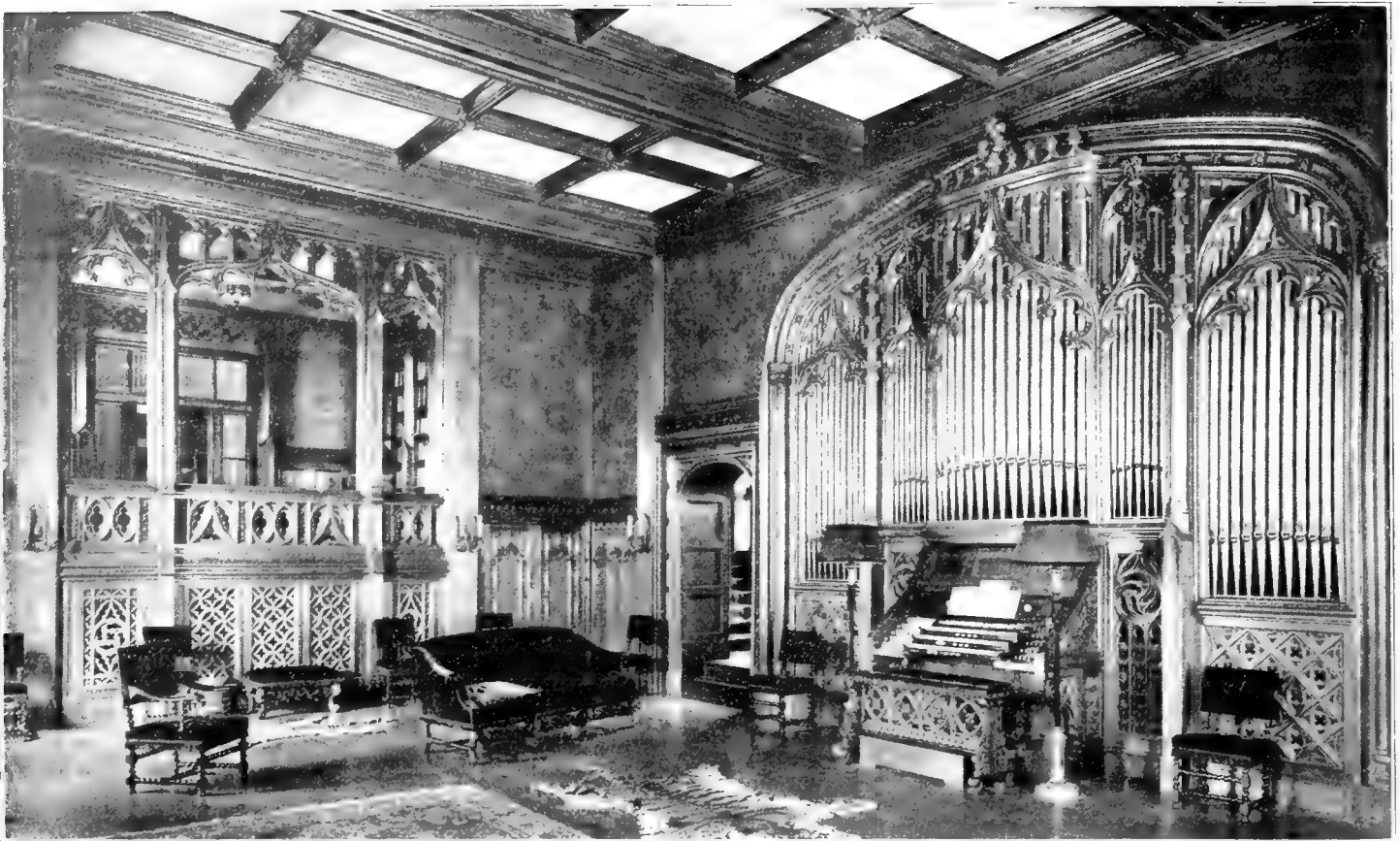
President Perrine asked for nominations to secure a member for the Indiana forestry board. J. V. Stimson, chairman of the committee on forestry, nominated W. A. Guthrie of Indianapolis, who was unanimously elected. The Hugh McLean Lumber Company of Buffalo was elected an honorary member of the association.

The nominating committee then reported, recommending the following officers for the coming year:

President: Van B. Perrine, Fort Wayne.
Vice-president: Redna Young, Evansville.
Secretary: C. H. Kramer, Richmond.
Treasurer: James Buckley, Brookville.
Directors: Charles H. Barnaby, Greencastle; George Palmer, Sheridan; W. A. Guthrie, Indianapolis; J. V. Stimson, Huntingburg; Samuel Burkholder, Crawfordsville; Claude Maley, Evansville; A. J. Jacoby, Hamilton; Frank Sheppard, Indianapolis; Frank Galbraith, Sunman; Haynes Egbert, Goshen; W. W. Knight, Indianapolis; E. A. Swain, Shelbyville; Walter Crim, Salem; George Waters, New Palestine; Frank Reynolds, Rushville.

The ticket was unanimously elected, after which the convention adjourned.

In the evening, the usual banquet was held in the dining room of the Hotel Denison. It was well gotten up and fully attended.



PIPE ORGAN AND TRIM IN PRIVATE MUSIC ROOM OF A NEW KENTUCKY HOME



Hardwood for Interior Decoration



Here are some pictures from a new Kentucky home that are offered as an adornment to this tale, and to illustrate an idea, which should be of value to the hardwood trade in exact proportion to the extent to which it arouses interest and action.

The idea is that there is a splendid boosting opportunity before the trade for pushing hardwood to more extensive use in interior decoration, as well as for trim and the generally accepted (or limited) run of millwork. And along with the idea it is desired to predicate the following propositions:

- 1.—That the best way to boost is to create more business instead of trying to get more of the other fellow's trade.
- 2.—That the people are spending a million dollars a day now for imported luxuries, a part of which might better be spent in building more luxuriant homes.
- 3.—That there is room for wonderful development in the use of hardwood for interior decoration as well as trim.
- 4.—That a good way to help bring about a greater use of hardwood for interior decoration is through exploiting examples of the attractive use of it in interior woodwork.
- 5.—That it is desire and not necessity that is mother to the biggest trade.

A recent press bulletin from the Bureau of Statistics at Washington tells us that the people of this country are now importing articles classed as luxuries at the rate of a million dollars' worth a day. This may not appear at first glance to have any connection with the use of hardwood for interior decoration. But just the same it has bearing in more than one place on the idea it is desired to advocate here of the hardwood trade making concerted effort to get more of its product used for finishing the interior of homes and public buildings.

It shows in the first place that the people of this country indulge in many luxuries. That being true, and being a habit that is

growing right along, what better idea is there than to direct this habit toward more worthy things—toward the building of bigger, better and more luxuriant homes? That is but one place it has bearing, though, and another is in this: The average home, as well as the furniture that goes into it, is in a way an example of luxury, of catering to desire, not resulting from necessity. True, every man must have some kind of a home, and some furniture, but those that necessity alone would call for would be considered very meager indeed. The average man builds a better home or buys better furniture because he has come to desire it, and it is therefore luxury and not necessity. So, it being evident from this that it is desire which begets the best part of the trade, it logically follows that the way to get a bigger trade is to create more desire.

The common way of making people want things in the mercantile world today is to exploit before their eyes in some form or other those things calculated to appeal. Therefore the hardwood trade should be able to arouse more interest and desire by displaying attractive examples of interior decoration made with wood used in various forms, for, just as the printing of attractive pictures of houses and detailing the plans of same has helped encourage building and enlarge the volume of sales in structural lumber, so should the showing of attractive interior woodwork enlarge calls for more.

And here's another bearing of this luxury matter: While this article was in course of preparation, there came to hand an issue of the Saturday Evening Post in which a writer on the subject of antiques tells of wealthy Americans going abroad and not only paying fabulous sums for the antique in furniture, but actually taking the woodwork out of the interior of old English homes, bringing it here and installing it as a fit setting for the furniture at a cost of from seven to ten thousand dollars per room for this old woodwork alone. That is what makes up part of those imports that are classed as luxuries.



A CORNER IN THE MUSIC ROOM, SHOWING ELABORATE DETAILS IN WOODWORK



VESTIBULE TO MUSIC ROOM IN QUARTER SAWED OAK

A lot of that kind of thing may be classed as a freaky fad, but it serves as a reminder that good hardwood is the thing that makes the best kind of interior decoration, and it also suggests that the people are ripe for some innovations in the way of inside finish. Nobody really admires a plastered wall, and the wonder is that we have not long since extended fine woodwork beyond the mere trimming of openings. There was the old ceiling, of course, and there is a lot of it yet, but that, like the plaster, is a thing of convenience and necessity, and not a matter of desire and luxury. What we need now is to develop the artistic in interior finish, and the thing to do it with is good woodwork.

There are many fine examples of woodwork in the form of interior trim in the country now, and the habit of using hardwood in this way is growing. The idea is to use the examples which do appeal to boost the game and thus increase the volume of call for hardwood for this work. The examples illustrated herewith are taken from the new home of G. W. Berry of Frankfort, Ky. They are

from only one room, the music room. Here we have an indulgence in a form of luxury that appeals so strongly that it should inspire more effort along the same line by others. There is not only a lot of fine paneling in quartered oak, but there is a wealth of detail in shaped and carved woodwork that makes one envious of the owner of all this. The illustrations need no elaboration in the way of explanation—they speak for themselves as an inspiring example of modern luxurious home building.

One can find here and there, and almost everywhere, other examples of attractive interior decoration with wood, some very rich and costly, others less expensive, but all infinitely more attractive than any other form of interior finish. Why not get busy, collect a lot of these, and by exploiting them help create a more general public desire for real inside woodwork, and through this means make good the proposition that the best way to boost is to create more business instead of trying to get some of the other fellows' trade?

J. C. T.



New Process for Making Sugar



Editor's Note

In eventual wood utilization it may be a far cry to discuss the commercial process by means of which a substantial food product for live stock may be secured from sawdust and wood waste. However, apparently it is within the possibilities of the future. The article herewith appended on this subject is by Dr. Leonard Keene Hirschberg, A.D. M.A., M.D., of Johns Hopkins University. From the source from which it emanates, it should be authoritative and worthy of consideration.

Chemists are complaining bitterly of the effect upon their research work which the lack of substantial support is having as compared with the enterprise in this direction shown in Germany, where it is announced that \$5,000,000 is being placed at the disposition of chemists for experiments in connection with synthetic rubber, which will doubtless ultimately prove of vast benefit to the German nation.

The British chemists, however, find some consolation in the fact that experiments in England have resulted in a discovery which, it is said, may revolutionize the sugar refining industry.

By a new chemical process the manufacture of sugar from wood and sawdust has become an accomplished fact. Large quantities of

the commodity have actually been produced, and it is said that arrangements are in hand for the establishment of factories throughout England for the exploitation of the process.

"Sacculose" is the term applied to the new product. The results obtained are what are called "classified process," in which sawdust is subjected in closed retorts to digestion with a weak sulphurous acid solution, and under the pressure of about ninety to one hundred pounds to the square inch effective transmutation takes place. Of the resulting product twenty-five per cent is sugar. The constituent sugar so formed is dextro in part and fermentable to an extent of eighty per cent. The rest is not fermentable.

Numerous experiments and demonstrations were recently made

by the well-known scientist here A. Zimmerman. Here are some of the experiments:

"Four draught horses were selected doing ordinary work with others, and, in the hot time of the year, when horses are generally expected to lose weight, the usual food ration was altered by deducting four pounds of oats a day from the food selected for the four and replacing them by four pounds of a 'sacchulose' molasses compound. The animals working in the same teams with the selected four, to which had not been given this food, showed no increase in weight, but those experimented upon showed a net gain in body weight, and worked better in every way. Increases in weight of seventy pounds, thirty pounds, thirty-five pounds and sixty-five pounds were shown respectively.

"A colt that was in such a weak condition that it could hardly stand was next experimented with. Four important veterinary surgeons obtained, after a careful examination, had given independent verdicts that the colt should be destroyed. Then the new food was given to the animal, first one and one-half pounds daily divided into three meals. This was increased to three and one-half and four pounds daily, the quantity of oats being slowly decreased in the same proportion. Two pounds of chaff also was given daily and hay unlimited.

"The weight of the animal taken at the beginning of the six months' feeding, was 623 pounds; the final weight, after that period, was 882 pounds, a total increase of more than 250. The colt is now in excellent condition and fit for any work.

"The secretary of an important Durham colliery reports that he finds that the substitution of two pounds of 'sacchulose,' mixed with molasses for an equal weight in oats, keeps the pit ponies and horses in a good, hard condition, similar to that when fed entirely on oats and chaff.

"In the production of milk and butter a keen exhibitor of dairy produce, after several years' failure to gain any first-class recognition at county shows, achieved successes during a period in which he experimented with 'sacchulose' mixed with oil protein.

"The manager of one of the largest firms of butchers has made the interesting discovery that the new food produced the best bacon and hams. A veterinary surgeon, after conducting experiments on his own horses, came to the conclusion that 'sacchulose' mixed with molasses was the best sugar food he ever tried, and its flesh-forming propensities were most pronounced.

"There are many possibilities apart from 'sacchulose' as a feeding stuff, for the utilization of this converted wood substance, and its value in these directions has yet to be considered. Its sugar content marks it out as a resource for some industries, and naturally the first of these is the manufacture of spirit. A factory capable of treating 200 tons of sawdust weekly could turn out between 300,000 to 400,000 gallons of proof spirit a year. This would also give by-products of 50 tons acetic acid, 10 tons furfural, and 2,000 gallons of methyl alcohol for recovery. The spirits produced are of high quality and free from fusel oil. It is thought that this, in these days, is of mixed advantage, since it appears that fusel oil obtained as a by-product is becoming more valuable than the spirits produced.

"This converted wood is said to be the cheapest base from which to start for the purpose of making synthetic rubber, whose source is starch or sugar. Converted wood will doubtless be of great assistance in the development of this process. The base of its derivatives may be used in the linoleum industry, for this specially treated and prepared base has many advantages for resilient treadings.

"Again, in the manufacture of mining explosives, while the organic matter is mixed with powerful oxidizing agents, this substance can be used with great advantage, since it can be minutely divided and has such rapidity of combustion.

"Not the least surprising of its characteristics are its non-conducting properties produced by appropriate treatment; so that for refrigerator packing, incubators, ice chambers, it will be found of great use.

"Much more could be claimed for it. Many outlets are under

investigation and undergoing patient developments. These varied processes are after all the result of, and go hand in hand with, the production of sugar from wood."

Mr. Zimmerman's experiments have raised considerable interest and comment in this country. Another scientist, Walter F. Reid, F. C. H., who is also interested in the new discovery, says that there is an enormous amount of wood still left in the world, especially in Europe, and it is a rather curious development that the United States, which had such enormous reserves of forests, is now going to outside countries for wood. On the other hand the total area of forest lands, including Siberia, is greater than the whole of the United States and Canada combined.

There are a great many sawmills in London doing a large amount of work, and the sawdust produced is far superior to that collected from the fresh wood in the countries in which the wood is grown. The wood used in London is mostly water-borne, from which the resin has been washed out, and thus gives a far better product.

Qualities of Water-Soaked Wood

While it has long been recognized that soaking wood had some effect upon it, no careful study of the matter has been made in this country. In a general way it is known that prolonged soaking results in leaching out certain substances, thereby making it lighter, somewhat more resistant to decay, easier to season, and reducing the tendency of the manufactured lumber to shrink and swell. In olden times leaching with water was much practiced by joiners. In Japan it is a common custom to store timber in water, and although this is done to protect the wood from rot, it is an interesting fact that Japanese wood manufactures excel in the absence of the unfortunate "working" and checking.

In order to determine just what influence soaking has on timber, a very extensive series of experiments through many years was recently completed at the Austrian experiment station. Wood from eighty-eight trees, representing nine different species, was used, one-half cut in summer, the other in winter. Specimens were tested after treating in four different ways, namely, (1) unsoaked, (2) soaked in standing fresh water, (3) soaked in running fresh water, (4) soaked in salt water. The soaking extended over periods of from one and one-half to three and three-quarter years.

One general conclusion reached was that soaking the wood in fresh water, such as occurs in the process of rafting logs, or from lying in mill ponds, or where wood becomes frequently wet from showers, and in similar ways, exerts a favorable influence on the wood by decreasing the hygroscopicity and thereby decreasing the shrinking and swelling. The danger of checking is lessened as well. A favorable influence also is probably exerted on the durability of the wood, though this could only be assumed. It would require several years more to demonstrate the accuracy of this conclusion. Another result was the apparent loss of strength to a small degree.

Soaking in salt water appeared to lessen the shrinkage as compared to that of unsoaked wood. Owing, however, to the absorption of salt, which has a strong affinity for moisture, the hygroscopicity is increased, thereby causing a greater degree of swelling and warping when the wood is exposed to variable humidities. The checking was lessened by the treatment, and the compression strength is also less than that of wood in the air-dry condition. Whatever influence time of felling may have had on the properties of the wood could not be detected.

As a result of chemical analyses of the test specimens it was found that treatment with fresh water produced an infiltration of lime and magnesia, while the storing of chlorides results from the soaking in salt water.

The use of wood soaked in fresh water is recommended by the investigator for artistic and industrial purposes. On the other hand, wood soaked in salt water is recommended for use only where durability is of more importance than freedom from "working" in a changeable humid atmosphere. Such wood should be thoroughly air-dried before being used and should be avoided in fine woodwork, as the salt in the presence of moisture is likely to cause rust streaks upon coming in contact with iron.



Flagstaffs for Railroad Men



One of the humblest uses to which wood is put, and yet highly important as to safeguarding human life, though perhaps never thought of by the ordinary man, is the little stick fashioned to fit the hand and upon which is attached a piece of bunting of one of the cardinal colors—the railroad signal flagstaff. One of these flagstaffs is rather a small article when considered as an individual product of wood, but when one stops to consider that every locomotive, every train crew, every caboose, every section foreman and every crossing guard has one or more sets, each set containing from three to five different flags, it can readily be understood that a vast number are used.

Like everything else, railroad flagstaffs are bought by the thousands each year by the larger railroad companies. Where they go no one can say with any degree of accuracy, any more than they can explain the disappearance of the billions of stick pins which are manufactured yearly. It is a safe conjecture that few of them are ever actually worn out. Perhaps most of them are unavoidably broken—maybe they are dropped from the hand of a freight brakeman under the wheels of a moving car, or it may be that the same brakeman has found his flagstaff an effective weapon in opening up the scalp of some tramp.

Most any piece of wood can be made into a flagstaff, but the really desirable article must be made of clear, sound, straight, tough and enduring material. Hickory would fully answer this purpose, but this species is by no means abundant and consequently is high in price, so that ash has been found by experience to be an equally desirable wood. Good ash is practically proof against wear as well as against the rain and snow and sun to which these staffs are exposed. There is a standard size for these articles, as there is for everything else that the big railroad corporations use in large quantities. The standard of the flagstaff is 24" long by 1½" in thickness. The length is sufficient to permit of a piece of bunting 12" or more in width to be attached, while the thickness is about right to fit into the grip of a strong hand. In some instances the staffs are ironed or a key screwed on to them to permit their being fastened in a socket on the rear end of a car. One or two of the railroads demand that a slit be sawed on one end of the staff, extending half its entire length, so that the bunting may be inserted in the slit and held tightly in place by screws extending from one half into the other. The addition of irons or brackets or slitting slightly increases the cost. The slit staffs are said to be more economical in the end, however, because the frayed bunting may be removed and a new flag inserted in its place. Thousands of staffs are thrown away by railroad men simply because the flag has become useless itself, and it is as easy to secure a new flag and staff from division headquarters as it is to return the staff itself and order a new flag to be attached.

By no means do all of the railroad companies buy their flagstaffs. Some of them attempt to manufacture a sufficient supply in their own shops at a cost that is very hard to approximate, yet without question is exceedingly high. For instance, one shop superintendent stated he had an old man—a man of all work around the shop—who in his spare time shaved these staffs from odd pieces of wood! Asked as to what wood was used and where the supply was obtained, he replied that most of it was parts of damaged cars that came into the shops for repair. He never had figured out what these staffs cost him, based on the time of the man of all work or on the value of the material used, or whether it was suitable or otherwise. Unquestionably, the superintendent would be saving money for the railroad company if he were to buy staffs from an outside source.

One of the trans-continental lines—it would be telling tales out of school to reveal the corporate title—uses for its flagstaffs broom handles! And these broom handles are not of the first quality at that. In fact, they are rejects and the railroad company pays \$22 a thousand for them. Even these features are not the worst that

can be said, since the broom handles are 36" long and the company does not even saw them off to the proper length before issuing them to the train crews. One can imagine with what respect a flagman observes one of these staffs. It is a safe bet that the president of that railroad company would not relish a lead pencil 15 inches long if it were handed to him to write with.

A special machine has been designed and is in use in several factories in the Middle West for manufacturing flagstaffs at a considerable saving over what it would cost a railroad company to turn them out by hand or a few pieces at a time. The machine in question is a modification of a spoke-turning lathe and has been developed into a highly efficient piece of machinery. In one of the factories the flagstaffs are a minor product in the sense that they are made of material from which larger articles are turned and serve to assist materially in eliminating the waste problem of that particular factory and at the same time bear the full return on the cost of manufacture as well as the proportionate share of overhead expense and return a profit to the manufacturer.

Freight Rates and Hardwood Prices

In discussing the rise in the price of hardwoods in the Central West, the sales manager of a large eastern hardwood manufacturing company recently advanced a unique theory in explanation. He said he had been of the opinion for a long time that the millmen of the Mississippi valley section were selling their lumber too cheaply and that they could get at least \$3 and perhaps \$5 per 1,000 feet more without in the slightest degree risking a competitive invasion of their markets at Chicago, Michigan and adjacent territory. He pointed out that there were two main gateways to Chicago, one of them being Cincinnati, for the lumber from the Appalachian chain, and Cairo, for the stocks produced in the Mississippi valley, including Arkansas and other states. The freight rate from Cincinnati to Chicago was the same as that from Cairo to Chicago, both being 10 cents. A wide difference prevails between the rate to Cincinnati and that to Cairo from points of production, the rate to Cincinnati being 17 cents as against 7 to 9 cents to Cairo. This difference constituted an arbitrary in favor of the Mississippi valley producers, who had by so much the advantage over the eastern producers. The difference amounted to about \$5, but the Mississippi valley millmen had for years been getting no more for their lumber than the eastern producers, although they could have advanced their prices to within 50 cents per 1,000 feet of the eastern arbitrary without at all endangering their markets. At last they seemed to have realized that they were actually giving away from \$3 to \$5 on every 1,000 feet of lumber and to have resolved to get this margin for themselves. Certain large jobbers, foreseeing the possibility or probability of such an advance, had placed orders taking up virtually the entire cut of the Mississippi valley mills for months to come at higher prices, and then advanced their figures. When the furniture manufacturers at Grand Rapids and other consumers were asked to pay the increase they naturally turned to other sources of supply, only to find that the figures they were called upon to give were still slightly below the quotations at which the eastern mills could lay down stocks, and the terms of the jobbers had to be met. Thus it was that lumber advanced in spite of the embargo placed upon exports by way of New Orleans and other southern ports by the burdensome regulations imposed by the railroads upon export stocks. The western advance, of course, has not helped the eastern mills, except perhaps that the Mississippi valley development has tended to make the export movement through eastern ports more active and thus relieved in a way what pressure might have otherwise been exerted upon the hardwood trade here. There is a limited area of hardwood producing territory, notably in the Virginias, that holds a distinct freight advantage to eastern points.



Annual of Chicago Association



The forty fourth annual meeting of the Lumbermen's Association of Chicago took place at the Hamilton Club on the evening of January 21. The usual dinner was provided preceding the regular meeting. There were about two hundred members present.

President Brown opened the business of the meeting with a report covering the year just closing. He summarized the work of the standing and special committees for 1912. The president's report stated that the meeting was the second annual of the recently formed lumbermen's association composed of seven divisions, although it was the forty-fourth annual of the old Chicago Lumbermen's Association. A seventh division was added last April, at which time the Millmen's Association was taken into membership. This division is known as Division G. Early in the present month the Stair-Builders of Chicago were also admitted to membership, their division being designated as H.

The report showed three deaths during the year,—C. W. Hinkley of the Soper Lumber Company; George Green of the George Green Lumber Company, both from Division A; and Edward Krupka of the Bursik & Krupka Company, Division G.

The president commended the directors and the members of the various committees for their faithful and patient service during the year and for their unselfish devotion to the welfare of the lumber industry of Chicago. A very apparent increased confidence among members and local customers as well as between Chicago lumbermen and distant shippers and consumers of lumber products has resulted from the association work. President Brown put himself very forcibly on record as believing that the local association would never reach its highest plane of usefulness until it could either compel the unscrupulous trader to go out of business or to correct his business methods. According to report, the net gain in membership for the year 1912 has been twenty-two per cent, but there are still many lumbermen and millmen in Chicago who could benefit from membership in the association.

The work of Murdoch McLeod, chairman of the finance committee, was particularly commended in the report. It was through the able efforts of this committee that the National Hardwood Lumber Association in its convention in Chicago last June was entertained with such complete satisfaction to all. The work of Oliver O. Agler, chairman of the entertainment committee, and the committee members was also commended.

President Brown also told of the inauguration of the idea of publishing the Lumbermen's News, the first issue of which was brought out last June at the time of the national convention. The paper has been published monthly by the publicity committee, which has had entire charge of the work. The publicity committee has been asked to consider installing some plan for the exchange of surplus stock, but a satisfactory plan has not been worked out during the past year. There is, however, an increasing demand for it and the report said that there is every probability that it will have early attention.

The trade relations committee, presided over by C. A. Flannigan, was one of the most important committees during the year 1912. One of its most important accomplishments was the extension of the fire limits of the city of Chicago. This question was worked out by the committee in conjunction with committees from the Association of Commerce and from the City Council. The result of its efforts was a considerable extension of the fire limits, which is fair and satisfying to all. This committee also consid-



FREDERICK L. BROWN, CHICAGO, PRESIDENT OF THE LUMBERMEN'S ASSOCIATION OF CHICAGO.

ered the proposed lumber exposition and urged favorable consideration by the board of directors of the association. The board, however, decided that it could go no further at this time than to extend its moral support.

The incorporation of the Lumbermen's Mutual Casualty Company, designed to provide adequate, satisfactory and reasonable liability insurance for lumbermen and woodworkers, was reviewed in the report. The incorporation of this body was the result of the recent employers' liability act that went into effect in Illinois last year. It was found that rates covering liability insurance were increased from two hundred and fifty to five hundred per cent. The new mutual company is the direct result of the efforts of the directors and officers of the Lumbermen's Association of Chicago. It has met with increasing popularity from the outset, as it has been demonstrated that the protection which it guarantees, the economy involved and the character of service extended by the company places it in the foremost rank of liability insurance.

The arbitration committee, headed by Frank J. Heitmann, has had an important work to do during the year. With a committee of this sort, composed of the type of men which form it, there seems to be small excuse for going into excessive expense in employing legal aid to settle controversies which arise naturally in the lumber business. Further recommendation of the employment of the committee's services is the fact that, being lumbermen, they can arrive at much more equitable decisions than could an ordinary court of justice. In the case of a serious disagreement beyond the jurisdiction of the arbitration committee, the committee on appeals has been provided. During the past year this has been headed by M. F. Rittenhouse. No appeals were made to the committee on appeals during the past year.

Mr. Brown's report also referred to the report of the inspection committee, with George J. Pope as chairman, which appears elsewhere in this article.

The traffic committee, with Herman H. Hettler as chairman, had considerable work to do regarding traffic matters bearing directly upon Chicago trade. A summary of the report of this committee is also found elsewhere in this article. The two most important subjects which have come up have been the policy of the association regarding increase of hardwood rates from the Southwest and regarding reconsignment in transit of Pacific coast products.

After referring to the possibilities of great future usefulness on the part of the credit committee, the report spoke of the present association headquarters, the completeness of which it strongly commended. The gradual crystallization of the sentiment in favor of some kind of a club feature resulting in the present Lumbermen's Club for the Chicago trade was outlined. President Brown deplored the occasionally expressed idea that the Lumbermen's Association of Chicago and the Lumbermen's Club of Chicago are propositions working on competitive lines. These two organizations are entirely and absolutely separated, both as to incorporation, membership and purpose. The lumbermen's association is made up entirely of firms and is purely for business purposes, while the lumbermen's club has entirely an individual membership and is of a purely social character.

The president expressed his regret at not being able to submit a complete report on a plan which has commanded considerable of his attention which will eventually involve the erection of the Lumbermen's building in Chicago in which both the association

and the club will be located in close proximity. The hope, however, has been carried so far as to warrant the statement that such a proposition is a possibility in the very near future. The leases on both the association and club quarters run out in a little over two years and it is hoped that before their expiration provision will have been made to finance the erection of such a structure, which will involve no expense whatever on the part of the local trade and will merely require them to agree to take quarters for a term of years in such a building when completed. The importance of the value of this question to the local trade needs no argument. The time and annoyance saved visiting millmen and buyers would mean a vast saving to the local trade and would undoubtedly serve to attract considerable trade to the Chicago market which might otherwise be diverted to other large centers.

Mr. Brown closed his report with an appeal for even greater co-operation among the membership and individual activity on the part of each member and further the president thanked the board and committees for their active and energetic co-operation with him during the past year.

Secretary E. E. Hooper in his annual report gave interesting statistics on lumber receipts in Chicago during 1912. The aggregate according to the best data obtainable was 2,670,696 feet of lumber and 501,651,000 shingles by rail and by lake. Of this 284,596,000 feet of lumber and timber were reported at the custom house as lake receipts. Lake shipments of shingles aggregated 1,660,000. Thus the total rail shipment of lumber formed a vast bulk of the total and aggregated 2,386,200,000. The total volume of receipts shows an increase of lumber of 536,129,000 feet.

Following is an analysis of the disposition of lumber at Chicago for 1912 and 1911:

	1912	1911
Inventory at beginning of year	255,766,107	268,240,000
Receipts during year	2,670,696,000	2,134,567,000
Total Stocks	2,926,462,107	2,402,807,000
Inventory at close of year	283,511,160	255,766,107
Total Consumption	2,642,650,947	2,147,040,893
Shipments	996,956,000	803,923,000
City Consumption	1,645,694,947	1,343,117,893
Total Consumption	2,642,650,947	2,147,040,893
Increase	495,610,054	

It was estimated by the secretary that sixty-five per cent of the total receipts represents hardwood, yellow pine and Pacific coast lumber.

The total enrollment of members, including the original enrollment of January 1, 1912, was 211 during the year. Twenty-four resignations were received, making a total membership of 187 concerns on January 13, 1913. The report then reviewed business and social activities of the association during the past year.

The secretary said that the arbitration committee has been called upon several times and has settled several important controversies, one being of great importance to the whole trade. The decisions in accordance with the charter of the association are as binding as those of the lower courts. The report also touched on the fire limits extension law and the organization of the casualty company. The secretary concluded by thanking the officers and members for their courtesy during the past year.

Secretary Hooper then read the report of the treasurer, which showed total receipts of \$18,416.14; total disbursements during the year, \$18,216.22; leaving a balance of \$200.32.

In the absence of Chairman George J. Pope of the inspection committee, the secretary read his written report. The report pointed out that great good has accrued to the local trade through the efforts of this committee during the past year. There have been 375 inspections made and in not a single instance was the department's inspection overruled.

The Chicago Lumbermen's Association is the only one authorized in its charter to appoint an inspector of lumber; thus the work done by this department is authorized by the state of Illinois, and its findings can be maintained in court. The report then reviewed specific instances wherein the inspection bureau

has actually saved money for the members of the association.

In reporting for the traffic committee, Hermann H. Hettler said that the traffic committee has worked in harmony with railroad interests and that no great difficulty has been encountered in securing equitable adjustment of questions affecting the local trade. He reviewed the co-operation with the Grand Rapids Lumbermen's Association in the matter of over-weights, which question has commanded the close attention of the Grand Rapids association for some time and which has a vast bearing on the entire lumber trade. The Grand Rapids association has compiled a large amount of data bearing specifically on the subject and is better qualified to contest the question with the railroads than is any similar body. Therefore it would appear that decision in the hearing of the question will be decided on the evidence submitted by the Grand Rapids association and special effort on the part of the Chicago association is therefore not warranted. Another subject that has commanded the earnest attention of the traffic committee is the announcement on the part of the transcontinental roads that they will eliminate the privilege of reconsignment in transit on shipments from the Pacific coast. According to new schedules of those roads, any wholesaler ordering lumber from Pacific coast mills must give the name of the consignee to the manufacturer and is not permitted to change that name while the goods are in transit. The injustice of this is altogether too apparent to leave room for any controversy. It will simply mean throwing away all the benefit that has been derived from working up the close knowledge of personal trade. It would work a great hardship on the wholesaler handling Pacific coast products.

Fair and adequate classifications on lumber rates, according to Mr. Hettler, is a question which will command the close attention of the trade in the future. There has been considerable agitation along these lines working toward the establishment of rates based on value of product, but very little has been accomplished. The letter from a member of the committee addressed to the secretary, as read by Mr. Hettler, pointed out very definitely the injustice of shipping all forms of forest products on the same relative rates. It can readily be seen that the shipper of hemlock bark, for instance, from a Wisconsin point should not be compelled to pay as high a rate as a shipper of a finished article such as doors, trim, siding, etc., coming from the same point.

Following a short talk by Paul Schmechel, chairman of the publicity committee, President Brown called upon the chairmen of the various divisions, each of whom responded with a brief talk in which the consensus of ideas was that the amalgamation of the varied interests in Chicago has resulted in a vast amount of good for the whole trade.

President Brown then called for report of the nominating committee, which committee submitted the following names for directors:

V. F. Mashek, division A; J. H. Dion, division B; George D. Griffith, division C; E. A. Thornton, division D; Murdock McLeod, division E; John Hansen, division F; C. C. Collins, division G, and Otto S. Lind, division H.

On the arbitration committee the following men were named:

F. J. Heitmann, division A; Fred D. Smith, division B; Frank B. Stone, division C; F. J. Pike, division D; E. A. Lang, division E; Edmund A. Allen, division F, and L. C. Haring, division G.

The nominating committee's choice for the committee of appeals voted the following men:

M. F. Rittenhouse, division A; A. H. Schoen, division B; T. S. Estabrook, division C; George T. Mickle, division D; John C. Spry, division E; F. L. Johnson, Jr., division F, and John Westberg, division G.

President Brown called attention to the fact that the by-laws provided that the retiring and the newly elected board of directors shall hold a joint meeting, at which the retiring members shall inform the newly elected members that they now constitute the board of directors of the Lumbermen's Association of Chicago. The two boards then elect presidents and vice-presidents from among themselves. This will take place on January 27.

Following the report of the nominating committee, the members were highly entertained by Wallace Bruce Hansbury, an elocutionist of undoubted ability.



What is a Fair Profit on Lumber



During the past few years attention has been directed more closely to business methods than ever before in the history of the country. Not only has the federal government investigated organizations of large interests with a view to preventing monopoly and insuring competition, but there has even been some serious study of the question of price regulation. While absolute regulation of the price at which goods must be sold seems to be a good deal of a chimera at present, there are some deep thinkers who believe that in the years to come such a method will be worked out and put into effect.

Certain manufacturers in other lines, a well-known shoe company, for instance, has gone so far as to take the public into its confidence, nominally at least, and has announced that its goods are to be sold to the consumer at a profit of five per cent above manufacturing and selling expenses. It may be noted in passing that the shoe company has not featured this plan much of late, though its failure as a publicity idea is said to have been due more to the dislike of the public for the \$3.60, \$4.20 and other odd prices attached to shoes as the result of the adoption of the five per cent plan than to anything else.

Lumbermen in many departments of the field, ranging from the sawmill man to the wholesaler, broker and retailer, are complaining of a shrinkage in profits. The cost of doing business is steadily going up, and apparently it has not been possible to put all of the increased expenses into the selling price, which, after all, is governed by business conditions and competition just as much as it is by the necessities of the manufacturer and dealer.

The question is naturally arising, "Am I making enough money out of my business? Are my profits normal now, or were they too large heretofore? Ought I get into the five per cent class, along with the shoe manufacturer and others who are acknowledging a willingness to let that increment represent the net profits of their business?"

In order to get a fair line on the correct basis for figuring profits in any business, one must have some knowledge of the rapidity of the turnover. That is the whole story, as far as determining a correct amount for the profit account. Merely realizing this fact at once puts the lumber manufacturer out of the class of the shoe maker, the clothing manufacturer and others who need use no such laborious and time-consuming processes as are required in the lumber business. And the lumberman who forgets this in determining what his profits should be is leaving out of consideration the vital and conclusive factor.

From the time the log is received at the mill until the lumber is shipped out is supposed to be not more than six months. Taking this as a basis, it is evident that the sawmill man who keeps his stocks on sticks for six months can turn his capital over but twice a year, at the maximum, not allowing for special conditions which may enable him to ship certain kinds of stock green, because of the pressing demand, or may compel him to hold certain other lumber on his yard for two years or longer because of the poor call for that particular item.

And as a matter of fact it is not possible to turn his money over twice a year, figuring a seasoning period of six months, for the reason that the credits extended must be taken into account. If the money represented in the lumber were to be paid as soon as it is loaded into the car, the idea would be carried out; but inasmuch as at least thirty days' time is given, and frequently much more, the period required from the time the board falls from the saw until the money for it is credited to the account of the manufacturer at the bank is pretty close to eight months.

The credit facilities of the lumber manufacturer of some size of course enable him to do a larger volume of business than his actual capital would indicate. Therefore the proportion of the volume of business done to the capital invested is probably greater than 4:3, as would be suggested by the foregoing. But, taking the sawmill

man as a general proposition, it is quite evident that a turnover of the capital invested twice a year would be a good showing, in view of the long period required for the seasoning of the lumber after it is manufactured.

The question is complicated, of course, by the fact that many sawmill owners who have little capital are financed by wholesalers and frequently get their money out of a lumber proposition before the stock has been put on the sticks. But, on the other hand, the financing of a sawmill necessarily involves a charge for the service, the profits of the manufacturer being cut down by the necessity of borrowing on the lumber that he is going to cut. He discounts his prospective sales, and, like every banking operation involving a discount, the man who furnishes the capital must make a charge for it.

However, assuming that the sawmill owner can turn his money over twice a year, and that he sold his output at a five per cent margin, the figure suggested by manufacturers in the other field, he would make a net profit on his investment of ten per cent. How would this compare with the shoe and clothing trades, to which reference was made at the beginning? Here are some facts taken from the experience of a clothing manufacturer, who is an acquaintance of the writer.

His capitalization is \$100,000, and he does an annual business of \$350,000. He has two selling seasons, spring and fall, and owing to the long datings given in that business it takes him six months, as a rule, to realize on his output. But, in spite of this, by means of the use of his capital and the money he can borrow from the banks, he turns his resources over three and a half times a year. He gets a minimum of five per cent net on this business, so that his minimum earnings are seventeen and one-half per cent on his capital. If the sawmill man earned but five per cent on his sales, the clothing manufacturer would have done seventy-five per cent better as to net profits than the lumber manufacturer.

In order to equal the results made in the clothing business, the lumberman would have to make at least eight and three-quarters per cent on his sales. And if his turnover is accomplished only once in eight months, a minimum of eleven and two-thirds per cent would have to be realized in order to enable him to equal the showing of the five per cent business of the clothing manufacturer.

The wholesale lumberman is confronted with a good many of the same problems as the sawmill man. He must yard and rehandle his stock and hold it for a longer or shorter period, depending partly upon the necessities of seasoning and partly on market conditions. His turnover should be more rapid than that of the manufacturer, though it is not nearly so fast as it is in a number of other businesses, where the jobber does a business six to eight times as great as his capital. This is because profits in the wholesale field in almost every branch of trade have diminished steadily, and increasing the volume of business has been the only solution of the problem.

Another fundamental consideration which affects the proposition is with reference to the raw material. The lumberman manufactures trees, which are produced slowly and which frequently are held for a long time before being cut. The interest on the capital tied up in this way must be considered, if the manufacturer owns his own timber, as well as the movement of the log from the stump to the mill. Considering the fact that the sawmill man's money is put out practically as soon as the tree is felled, the period covered by the development of that expenditure into profits resulting from the sale of the lumber is very greatly increased, making additional profits necessary in order to equalize the proposition.

The manufacturer in most other lines pays for his material after it is delivered to him, ready to use; and frequently has his own product on the market and is realizing returns before it is necessary for him to pay for the goods which he has consumed. This reduces the outlay of capital necessary to produce a given volume of busi-

ness, just as in the other case it makes a greater outlay by the lumberman necessary in order to pile up business of that amount.

In every direction, therefore, practical conditions make it impossible for the lumber operator to realize upon his investment as rapidly as manufacturers in most other lines; and the fair conclu-

sion, then, is that the sawmill owner, as well as his collaborator, the whole-sale yard man, is entitled to a much larger profit upon his product than is justly accorded to the producer of goods which can be manufactured and sold more rapidly and more easily than lumber.

G. D. Cole

Distinguishing Between the Gums

There are several trees of this country commonly known as gums. One of them, the red or sweet gum, belongs to the witch hazel family (*Hamamelidaceae*) and bears no close relation to black gum, water gum, tupelo and sour tupelo which are in the dogwood family (*Cornaceae*). The name "gum" is also applied to several species of *encalyptus*.

Red or sweet gum (*Liquidambar styraciflua*) is widely distributed through the swamp forests of the eastern United States from south-west Connecticut to Texas. It reaches its best development on low bottomlands subject to overflow in the basin of the lower Mississippi river and in the coastal region of the south Atlantic states. In the northern portions of its range it is a medium sized tree but at its best there are few that can equal it for size, straightness of trunk, and clear length.

The wood is rather heavy, the average weight of thoroughly dried material being thirty-seven pounds per cubic foot or about ten pounds lighter than white oak. The specific gravity is 5.9. The wood is moderately hard, fine-textured, often with cross or interlocked grain which interferes with working and makes boards very liable to warp. There are no large pores but the numerous small ones are scattered throughout the wood and are scarcely visible to the unaided eye. The rays are fine but distinct. The color is reddish brown, usually with irregular dark streaks producing a "watered" effect on a smooth longitudinal surface resembling closely the markings in Circassian walnut. The sapwood is nearly white, in some trees being quite thin, in others making up a very large proportion of the trunk.

Red gum was rather late coming into commercial importance, largely on account of the difficulties of handling the lumber under the careless methods usually employed. Proper attention to time and methods of logging, to sawing, and to piling, seasoning and handling the lumber has changed all this so that many industries could scarcely exist without it.

In 1910 this wood stood eleventh in production of sawed lumber with a cut of 610,000,000 feet. This was nearly 100,000,000 less than in 1909. The lumber was cut at 3,716 mills in 22 states. Arkansas furnished 30 per cent of the cut and Mississippi a little over 24 per cent.

In the production of slack cooperage staves red gum is an easy leader with a third of a billion or 22.8 per cent of the total in 1910 as against 18.3 per cent of pine, the nearest competitor. Nearly three-fourths of these staves were made in Missouri and Arkansas. In slack heading red gum ranks fourth with over 11,000,000 sets out of a total of nearly 100,000,000.

Red gum has gained a good foothold in tight cooperage and in 1910 furnished 23,000,000 sawed staves, or 7.5 per cent of the total. It furnished 4.2 per cent of the oil and tierce staves, none of the spirit, wine, Bourbon and pork staves, but a larger share of the half-barrel staves, cut-offs and lead staves. In the production of tight cooperage heading red gum ranked fourth with 975,540 sets of 4 per cent of the total in 1910.

Red gum is much more widely used for veneer than any other wood and for the last four years upon which statistics are available constituted approximately thirty per cent of all wood used. The large increase in consumption over other woods is due to the fact that it is considered an ideal wood for the rotary machine and that the stumpage is more easily obtained than that of any other wood except yellow pine. The tendency of red gum to check and warp when used as lumber is overcome by converting it into veneer. Not only does it

cut readily but with improved driers is easily kiln dried. It takes glue readily thus making it valuable for built-up stock, where it can be used either as face wood or cross banding. The total amount of red gum consumed in 1910 in the manufacture of veneers was over 158,000,000 feet log scale. It is used for packing boxes, veneer barrels, fruit baskets, chair bottoms, drawer bottoms, three-ply lumber, butter dishes, and wooden plates. Some of the finest rotary cut veneer is finished to imitate Circassian walnut.

Red gum is much used for furniture, but very often under some other name than its own. In European markets it is known as "satin walnut" and is in considerable demand. Italy admits all timbers, except cabinet woods, duty free. Misled by the name "satin walnut" and the optimistic claims of the exporters of this wood, red gum was for a time subject to an import duty of ten dollars per thousand. Getting the matter adjusted without retracting anything was a diplomatic feat of high order. It is said that red gum furniture is reshipped from Italy and France to this country and sold under the name of French and Italian walnut.

Gum lends itself readily to imitation of other woods by staining and printing. The sapwood can be put through a machine with a brass die and reddish ink and made to look like Spanish cedar with the reddish markings in it. Printing plates are made from impressions taken directly from oak, mahogany or other wood it is desired to imitate, and with the proper color of ink it is possible to feed in gum and take out a figured wood. None of these, however, can compare with the natural beauty of "watered" or "clouded" specimens of the gum wood.

The other important gum woods belong to the genus *Nyssa*. All except the sour tupelo yield woods that are now being used extensively for commercial purposes. While the trees can be readily distinguished in the forest, the woods are less easily identified and are usually sold together as tupelo. There is considerable variation in the characteristics of wood from different trees of the same species, which adds to the difficulty of ready separation by superficial characters.

The heartwood of these gums is not always easily distinguishable from the sapwood, which is quite thick in all species except sour tupelo. The color varies from nearly white to cream-color or light brown in some cases. The wood is light, soft, tough, fine and uniform textured, cross-grained, and difficult to split. Of the four the black gum is considerably the hardest and heaviest. The wood of the others is easily indented with the thumb nail.

Tupelo was rather slow coming into use in this country, there being much the same prejudice against it as against red gum. It has long enjoyed a sale in European markets under the name of "bay poplar." The home demand for it is rapidly increasing, especially so as the supply of other timbers is being reduced.

It is well adapted to a great many purposes. Its uniformity of color and texture, its freedom from knots and defects, the large size and quantity in which it can be obtained, the readiness with which it takes paint and stain, are features which far outweigh the difficulties of manufacture and seasoning of the lumber. The cut of tupelo lumber in 1910 was over 92,000,000 board feet. This figure includes lumber from all species of *Nyssa*. The cut of the wood previous to 1906 was too small to warrant separate tabulation and in that year about 48,000,000 feet was reported. Louisiana is the center of production.

In 1907 tupelo was just beginning to be heard of as a slack cooper-

age wood, producing 2,000,000 staves and a little over 200,000 sets of heading. In 1910 nearly 31,000,000 staves and 3,000,000 sets of heading were made of this wood. North Carolina contributed over 72 per cent of these staves.

Tupelo is also making rapid gains as a veneer wood, the amount consumed in manufacture of veneers in 1910 being nearly 27,000,000 feet, log scale. It is also used for interior finish, ceiling, flooring for warehouses, factories, railway depots, offices and dwellings, boxes and crates, wagon box boards, furniture, laundry appliances and woodenware. It does not splinter and holds nails firmly without splitting.

Tupelo or cotton gum (*Nyssa aquatica*) occurs in deep swamps inundated during a part of every year along the southern Atlantic coast region and in the lower Mississippi and Wabash valleys. It is of greatest size in the cypress swamps of western Louisiana and eastern Texas. It forms large, straight trunks, though with abnormally large base, not unlike that of cypress.

The wood is almost uniformly white, with now and then a slight tinge of yellow. The weight of thoroughly dry wood is 34 pounds per cubic foot; specific gravity .54. The pores are scarcely, if at all, visible to the unaided eye, are numerous and evenly distributed throughout the growth ring. The wood fibers have rather thin walls and large cavities, which accounts for the softness of the wood. There is little contrast between the wood formed at different times of the year, consequently the annual rings of growth are not conspicuous and the texture is uniform. The wood of the lower part of the buttresses is very light and soft, due to the very thin walls and comparatively wide cavities of the cells. It is called corkwood and is used largely in the preparation of tupelo-sounds.

Water gum (*Nyssa biflora*) is distributed from Maryland to Florida and central Alabama. It is a rather small tree with a much enlarged base. The wood is moderately soft and heavy, not strong, though very tough and very difficult to split. The weight of the dry wood is 31 pounds per cubic foot; specific gravity .50. It appears in the market as tupelo and is not readily distinguished from it. As a rule it is more cross-grained and difficult to split than tupelo (*Nyssa*

aquatica), and the annual rings of growth are wider. In tupelo the pores are often arranged radially, but in water gum the distribution is more or less even throughout.

Black gum (*Nyssa sylvatica*) is also known as sour gum, tupelo and pepperidge. It is widely distributed throughout the eastern half of the United States. It often reaches large dimensions, particularly in the southern Appalachians.

The wood is rather hard, heavy, strong, very tough, extremely difficult to split, close-grained and uniform textured. The heartwood is cream-colored or sometimes very light brown; the sapwood is white and usually quite thick. The weight of dry wood is 40 pounds per cubic foot; specific gravity .64. The pores are small and less numerous than in the preceding species. The wood fibers have thick walls and small cavities, which accounts for the greater weight, hardness and strength of the wood.

The wood of black gum is very hard to season. It is so tough that it can be successfully used for the hubs of wheels, rollers in factories and mines, ox yokes and sometimes for the soles of shoes. It is possible that it might prove suitable for shuttles which require a wood that will resist wear and take a very high polish with use. The wood, like that of the other gums, is not naturally durable in contact with the soil. If creosoted, however, its lasting qualities are excellent. Its use for fuel is limited on account of the difficulty in splitting.

In the report of the wood-using industries of Massachusetts the following uses of black gum are enumerated: "Agricultural implements, furniture, gun stocks, interior trim, panel work, piano trusses, pipe organs, porch posts."

Sour tupelo (*Nyssa ogeche*) is a medium-sized tree of local occurrence in deep swamps in the extreme southeastern coast region of the United States. The wood is light, soft, not strong, tough, and splits with less difficulty than that of any other of the gums. The weight of the dry wood is 33 pounds per cubic foot; specific gravity .53. The rays are wider than in the other species, and the pores are much larger and unevenly distributed. The wood fibers have thin walls and large cavities.

S. J. R.



Michigan Manufacturers Meet



The mid-winter meeting of the Michigan Hardwood Manufacturers' Association was held on Friday, January 24, at the Pontchartrain hotel, Detroit.

The roll call showed that thirty members were in attendance. Three new members were admitted to membership. This business was followed by the report of the secretary, which was in part as follows:

Secretary's Report

The year 1912, from the standpoint of the lumber manufacturer, has been a remarkable one, and to find anywhere near a fair comparison we have to go back to 1906.

The outlook for 1913 from a manufacturer's standpoint is very optimistic and I have yet to find a pessimistic manufacturer. We believe that the reports shown here today will carry out that impression and prove to be the forerunner of another successful year.

Our stock reports give the figures of sixty-four members, one less than reported a year ago. We consider this a very good showing, taking into consideration the fact that quite a number of our members have cut out this year.

The sixty-four reports for January, 1913, form a very fair comparison with the sixty-five reports of one year ago.

At this writing the secretary has collected in all but one assessment in the Forest Fire Protective Department and five assessments in the general fund, and we have the promise that these amounts will be in our hands very soon. Our assessment on shipments of hardwoods from Oct. 1, 1911, to Oct. 1, 1912, has yielded us 342,510,328 feet, amounting to \$6,850.26, as against 313,855,219 feet a year ago, amounting to \$6,277.05. We have a sufficient amount in our Forest Fire Protective Department fund to carry on the work well into the coming season.

There isn't a manufacturer present that is not vitally interested in the working of the new employers' liability act, which became effective Sept. 1, 1912. I learn that a large majority of our members have signified their intention of coming under the act and have filed their

acceptance of same with the secretary of a State Industrial Board. Some of the members are letting the state carry their insurance, while others are taking care of their own losses on basis of the state liability law.

The secretary's office at the request of some of our cargo shippers has been disseminating information regarding values of lumber shipped by cargo and this information has been mailed to the cargo shippers only, with the exception that the information has been placed in the hands of all members of the market conditions committee. One reason for not giving this information to the car shippers, was the probable influence which some of the lower values of cargo shipments might have on the car trade. Let me state here that it was not and is not the intention of the secretary to discriminate between any interested in the association and that the information at hand is open to each and every member. If it is thought best by the members present to send all of this information to each and every member, we will gladly do so.

You will note that for some time a large majority of the manufacturers have felt that there should be some changes in the rules for the grading and inspection of hardwood lumber. Your grading rules committee in conjunction with the bureau of grades of the Northern Hemlock and Hardwood Manufacturers' Association, met the inspection rules committee of the National Hardwood Lumber Association in Chicago, Jan. 13, 1913, when it was agreed to present again at the convention to be held next June in Chicago practically the same rules as were refused us a year ago, and we are hopeful that this time they will be carried. Chairman Day will make a report on this subject today.

Your secretary has been handling the Pacific coast rate case for a long time and is pleased to advise that the final hearing on the subject was held before Interstate Commerce Commissioner Prouty in Chicago, Jan. 20, and we are looking for an order from the commission allowing reparation on shipments of lumber, etc., to basis of an eighty-cent rate, carrying the rate back several years before the railroads published that rate.

The secretary desired to call attention to the members of the proposed changes in the Michigan class rates. Perhaps you are not aware, but it is a fact that the railroads in Michigan have been re-checking class

rates with a view to lowering them in the lower points of Michigan and that there is likely to be some advance. For example, lumber takes sixth class in carloads in the official classification; fourth class in less than carload lots. Lumber in Michigan that is practically on the commodity basis less than sixth class. For example, the rate on one hundred miles on lumber today is seven cents for that distance. The new sixth class rate for one hundred miles is $8\frac{1}{2}$ cents for one hundred pounds. After the class rates are established, what is there to prevent the railroads from withdrawing the commodity rates and using the regular classification basis, which would mean quite a stiff advance?

The treasurer's report showed receipts \$9,550.87 and disbursements of \$2,369.72, leaving a balance January 16 of \$7,181.15.

The report of the forest fire department showed receipts \$4,099.80; expenses, \$620.13, with balance January 16, \$3,479.67.

Vice-president C. A. Bigelow, who officiated in place of President F. L. Richardson, in his absence, asked for a resolution on the death of F. W. Gilchrist, and appointed a committee to draw up such a resolution.

The report of the grading rules committee follows:

According to instructions received from the association, the grading rules committee met together with the committee from the Northern Hemlock and Hardwood Manufacturers' Association, in conjunction with the National Hardwood Lumber Association at Chicago, January 13, for a further consideration of the rules previously submitted. The sentiment of the members of the National association committee was to reopen the subject, which the Michigan committee was not inclined to do. It was finally decided to accept the report as presented, and the National association committee take action on the same.

Chairman Day stated that as a member of the committee he could take no other stand than the one already presented, with the result that practically all the points which were asked for were conceded. One exception was taken in the matter of five-inch strips being included in the seconds. It was stated that this was the principal point which raised the objection last summer. If the Michigan and Wisconsin associations would concede this point there will be no difficulty in passing the present suggestion. Under these conditions, Chairman Day stated that he had agreed to take up the matter with the Wisconsin and Michigan delegates. All of these delegates were willing to concede this point with the understanding that paragraphs six, eight and nine should be changed to a new paragraph to read as follows:

"Ten per cent minimum width mentioned in all grades may be one-quarter inch scant." This was accepted. The original reading was:

"Minimum width mentioned in all grades of firsts and seconds as four and five inch must be of full width, five per cent of the minimum width mentioned in all other grades, making one-quarter inch scant."

Chairman Day said that this was his recollection of all the changes that were made with the exception of a few minor ones as to the grading in white maple. He concluded his report by urging all members to attend the coming meeting of the National Hardwood Lumber Association in the interest of the proposed changes in hardwood rules.

Chairman Hickok reported on the work contemplated for his department for the coming year, and outlined a system of preparing maps showing the whole territory and all conditions. His work and his report were warmly commended by the association, and the latter was adopted.

The report of the market conditions committee as submitted by Chairman Bruce Odell is summarized as follows:

Stock report shows an unusual decrease in both the total of the hardwood lumber at the mills and the amount unsold. The decrease during the year 1912 amounted to thirty-six per cent. The stock of hardwood lumber on hand January 1, 1913, was less than sixty per cent of normal. Of this there was more than seventy per cent sold. The largest decrease shown is in beech, there being only about forty per cent of the normal stock on hand at present. The stock of birch shows about the same. Stock of maple shows less than sixty per cent of normal, and maple flooring about the same.

The comparatively warm and open winter curtailed logging output so that it will not be possible for manufacturers to increase their cut during 1913. January aspects indicate a decrease in hardwoods of fifteen million feet from 1912.

Attention was called to the valuable information furnished in regard to annual cut. Estimates for 1912, 417,000,000 feet, and the actual cut, 406,000,000 feet, a difference of less than three per cent.

Chairman Odell called attention to the fact that if the producers can start the year knowing how much available stock there is on hand, and how much will be consumed during the year, the information is worth the cost of the association work.

Chairman Odell also referred to the increase in demand for mixed soft elm during the last six months, which has resulted from an increased demand from automobile manufacturers. More maple is also produced in automobile manufacture. It is estimated that in Detroit in 1913 over fifty million feet of maple will be consumed.

C. A. Bigelow talked on the state employers' liability act, stating that under this act and under the insurance commission ruling, employers of labor would be able to get liability insurance at cost. It is intended to create a surplus, one-half of which will revert back each year to the credit of the preceding year's premium.

The members discussed the question and it was concluded that the matter was of considerable importance to all employers of labor.

TRAFFIC MATTERS IN MEMPHIS TERRITORY

The Southern Hardwood Traffic Bureau has been organized here. It succeeds the Lumbermen's Traffic Bureau of Memphis which was launched here during the summer. George D. Burgess, of Russe & Burgess, Inc., is president; Walker L. Welford is first vice-president and J. D. Allen, Jr., treasurer. J. H. Townsend, who was manager of the Lumbermen's Traffic Bureau, occupies a similar relation to the new organization. There is a board of managers composed of fifteen lumbermen, whose terms of service are divided as follows: One year—L. E. Brown, O. M. Krebs, Frank May, S. M. Nickey and John W. McClure; two years—John Dwyer, S. C. Major, W. S. Darnel, C. M. Green and James E. Stark; three years—D. D. Nellis, C. B. Dudley, W. A. Ransom, F. F. Fee and W. B. Morgan.

The principal purpose of the new organization will be the maintenance of equitable freight rates and facilitating the settling of claims. It is regularly incorporated under the laws of Tennessee and the change of name and incorporation has been made with a view to allowing prominent lumbermen outside of Memphis to become affiliated with this bureau. There are a number of rate contests before the Interstate Commerce Commission affecting Memphis and all points in the Central South and the bureau will be quite busy with these during the next few months. Preparations are now being made to argue these cases before the commission which has suspended the advance pending hearing.

The Southern Hardwood Traffic Bureau has already petitioned the Interstate Commerce Commission to suspend the tariff recently filed with that body by the Texas & Pacific Railroad. This new tariff, unless suspended by the commission, will become effective about March 1. The advance will affect tupelo gum from all points along the Texas and Pacific to Mississippi and Ohio river crossings and also ash and oak from all main line points on the railroad to Mississippi and Ohio river points. The extent of the scheduled advances is two cents a hundred pounds. The lumbermen will, if they secure an order of suspension, make an effort to present testimony showing that present rates are high enough and that any advance will be unreasonable.

No definite date has been set by the Interstate Commerce Commission for the hearing in the Anderson-Tully case, which involves the issuance of through bills of lading on hardwood lumber shipments from points west of the Mississippi river. It is understood that this hearing will be held in New Orleans, but no definite time has been fixed. There is a great deal of inconvenience and loss to lumbermen in the present system of shipping on local bills to ship side, and the lumbermen here are very desirous that this matter shall come up at an early date and that at the next hearing it may be finally disposed of.

The Mail Bag

Any reader of **HARDWOOD RECORD** desiring to communicate with any of the inquirers listed in this section can have the addresses on written request to the Mail Bag Department, **HARDWOOD RECORD**, 537 South Dearborn Street, Chicago, and referring to the number at the head of each letter and enclosing a self-addressed stamped envelope.

B 383—Poplar Moldings Wanted

London, E. C., Jan. 8.—Editor **HARDWOOD RECORD**: We would be pleased to have you advise us of anyone you know of who will make poplar electric casings. Anybody making poplar moldings would be satisfactory, and we would be able to tell them exactly how to make them so as to save not only wood but a lot of labor.

The above inquirer has been supplied with a brief list of manufacturers of poplar mouldings.—EDITOR.

B 384—Seeks Poplar and Cottonwood

Houston, Tex., Jan. 13.—Editor **HARDWOOD RECORD**: We are in the market for cottonwood and poplar in different sizes—also panel stock.

WORKS.

The foregoing correspondent has been given the names of various factories of popular moldings.—EDITOR.

B 385—Wants Market for Excelsior

Pulaski, Va., Jan. 14.—Editor **HARDWOOD RECORD**: Would you kindly give me some buyers of excelsior and an idea of the best woods to use for this purpose?

Thanking you in advance for any information you may be able to give, I am.

The above party has been advised that the principal buyers of excelsior are manufacturers and wholesale merchants who do a lot of packing, such as dishes, bottles, hardware, lamps, furniture and small articles generally. A little excelsior is used by upholsterers.

The excelsior makers of North Carolina use white pine, yellow pine and yellow poplar. Most soft, stringy woods answer, such as spruce. The markets for excelsior are generally in nearby towns and cities, as it is not usually shipped far.—EDITOR.

B 386—Has Hardwood Ashes to Offer

Halifax, Nova Scotia, Jan. 13.—Editor **HARDWOOD RECORD**: I would feel much obliged if you would give me the names of dealers of hardwood ashes in any part of the United States.

The writer of the above letter has been informed that the buyers of wood ashes in this country are mostly manufacturers of fertilizers, although the pearl ash and potash people buy some. He was further told that he could probably obtain the addresses of firms in this business from trade and city directories in districts where he wished to do business.—EDITOR.

B 387—Attention Oak Manufacturers

San Francisco, Cal., Jan. 15.—Editor **HARDWOOD RECORD**: We are interested in getting figures from eastern mills on a quantity of a million feet oak lumber, plain and quarter-sawn, and would appreciate your putting us in touch with some mills that will be able to quote us.

Hoping that our little request will merit your prompt attention, we are,

COMPANY.

The above concern is a prominent wholesaler in San Francisco and has been supplied with a list of manufacturers of the lumber for which it is in the market.—EDITOR.

B 388—Wants Beech Drawer Sides

Salem, Ind., Jan. 20.—Editor **HARDWOOD RECORD**: We have been requested by you in the past to fill out list showing stock we wanted, which we have not done as we have been able to supply our requirements without this. However, we see quite a number of furniture people are using beech drawer sides and we presume they are buying these already worked to their special sizes.

If you know of anyone who is manufacturing beech drawer sides, we will be glad to have you put us in touch with them.

The above correspondent has been supplied with a list of concerns likely to be in position to supply this stock.—EDITOR.

B 389—Denial of Authenticity

Memphis, Tenn., Jan. 20.—Editor **HARDWOOD RECORD**: Referring to article in your issue of January 10th of the **HARDWOOD RECORD**, which

you state is an interview by a **HARDWOOD RECORD** representative, would state I have never been interviewed by one of your representatives, nor have I given anyone permission to publish such an article and the statements made as coming from me direct are without foundation. Moreover, such statement would most certainly injure Russe & Burgess, Inc., and myself with foreign brokers, and I request that you print in your next issue an article stating the matter given you by your representative was not received by him from me, and that I had nothing to do with it whatever.

Yours truly,

G. A. FARBER,
Sec'y, Russe & Burgess, Inc.

News Miscellany

Lake States Forest Fire Conference

Delegates to the second annual meeting of the Lake States Forest Fire Conference, held at Lansing, Mich., Jan. 21 and 22, declared for separation of the state fire warden's departments from politics, efficient forest patrol, and co-operation between state and private fire associations. The conference was made a permanent organization and the following officers elected: President, Filbert Roth, head of the forestry department of the University of Michigan; vice-president, F. B. Moody, state forester, Madison, Wis.; secretary-treasurer, F. B. Wyman, secretary Northern Forest Protective Association, Munising, Mich.

The legislative committee recommended absolute divorce of the game and forestry departments; that the work of forest protection and administration be placed in the hands of a competent and non-partisan board; the appointment by board or commission of an expert and competent forester together with necessary assistants who shall have charge of and have supervision over all forest administration and protection; general forest and fire laws along lines of the present Minnesota law; a law to embrace a well considered forest land policy; a new tax law with annual land tax based on soil values, and timber tax based on value of timber at the time it is removed from the land; the appropriation of sufficient funds to enable state forester to enforce to the full all existing forest and fire laws and such others as may be passed.

It was contended, especially in Michigan, that the fire protection with game protection is a poor mixture and inefficient for the reason that residents of the timberlands are generally antagonistic to game wardens and do not co-operate with them.

The conference adopted resolutions asking and urging the lake states and the province of Ontario to provide larger appropriations for fire protection; to form new associations for fire fighting; to co-operate with all forest fire fighting organizations; to oppose any transfer of forest reserves to states by the United States government, as the fire fighting efficiency was greater under the federal government's supervision; to urge and advocate the development of institutions turning out trained men; states to reserve non-agricultural lands.

One of the most interesting papers read was that by William T. Cox, state forester of Minnesota, on "Minnesota's Progress Under Her New Forest Service Law." The Minnesota law is said to be the most perfect in the Lake States. E. J. Zaritz of Guelph, Ontario, gave a resumé of Ontario's fire fighting experiences. The revenues from the government's timber average about \$1,500,000 a year, and she has large areas of virgin white pine to protect. Weakness in the system, however, was shown by Mr. Zaritz to be due to lack of facilities for communication.

Subjects of papers were as follows: "Fire Fighting in the Pacific Northwest," Prof. P. S. Lovejoy, formerly of the U. S. Forest Service, but now of the Michigan University; "Methods of Preventing Railroad Fires Used by the Chicago, Milwaukee & St. Paul Railroad Company," J. F. Lovejoy, Milwaukee, Wis.; "How the Railway Fire Situation is Being Handled in Canada," Clyde Leavitt, Inspector for Railroads, Ottawa, Canada; "Prevention of Railroad Fires in New York State," William G. Howard, assistant superintendent forests, Albany, N. Y.; "A Discussion of National Forest Service Work in Michigan," William B. Piper, East Tawas, United States supervisor; "Influence of Fires Upon Settlement of Lands," J. H. McGilivray, Oscoda, Mich.; "State Co-operation Under the Weeks Law," J. Girvin Peters, United States Forest Service, Washington, D. C.; "Railroad Fire Situation in Michigan," W. R. Oates, game warden, Michigan; "Patrol and Fire Prevention," Charles F. Hickok, chief warden of the Michigan Hardwood Manufacturers' Association, Gaylord, Mich.

The conference was well attended by many Michigan officials, representatives from associations, organizations and governments of Minnesota, Wisconsin, Ohio, New York and Ontario.

Better telephone service was urged as well as the construction of wooden watch towers, firebreaks, burning of brush under warden's supervision, and co-operation with railroads.

Meeting of Wood Preservers

The annual meeting of the American Wood Preservers' Association was held in Chicago, Jan. 21, 22 and 23, and, as usual at the meetings of this association, a number of excellent papers were presented. The longest was by W. F. Goltra and went somewhat fully into the history of wood preservation in the old world as well as in the new. The treatment of

wood to hinder decay is supposed to date a good while back of the Roman empire; but it began to assume modern form about two hundred and fifty years ago. However, the use of treated wood on a large scale began when the increased cost of ties forced the railroads to adopt methods of prolonging the service of the ties. Forty-seven different methods of timber treating had been discovered and put into use up to 1846. Most of these were based on the principle of poisoning the wood, either on the surface or within, to prevent attacks upon it. Some of these treatments were directed against boring worms and other insects rather than against decay-producing fungi.

H. L. Collier's paper on the efficiency of yellow pine paving blocks proved a strong argument in favor of that material. The argument was backed up with facts collected in many cities where the pine blocks had been put to severe tests. A dozen or more points of superiority were claimed for the pavement, among which were these: It is sanitary and durable; is reasonable as to first cost; can be repaired easily and economically; it offers the least resistance to traffic; furnishes good foothold for horses and takes care of the automobile; it is easily cleaned and is nearly noiseless; it possesses elasticity; is nearly dustless; the surface wears uniformly smooth; the material is not easily affected by climatic changes.

The author of the paper suggested a number of improvements by which the block pavement may be made more efficient. The chief of these are, better foundations; better spaced joints between the blocks; more careful fittings around openings and next to the curbing; and several other improvements in mechanical devices for laying and adjusting the blocks.

David Allerton's paper advocated preliminary treatment of certain timber to insure a more uniform and satisfactory impregnation with creosote.

Dr. Hermann von Schrenk's paper on the requirements for successful timber treatment pointed out a number of matters which should be carefully considered. The first was that none but perfectly sound timber must be treated. It was said that it not infrequently happens that timber is already in incipient or even advanced stages of decay when it reaches the treating plants, and of course no process can make such wood sound. Other points to be considered are, that none but properly seasoned timber be treated; a good preservative is essential to long life; and proper injection is essential as to quantity and penetration. Proper subsequent handling of the timber is essential also.

A paper presented by James A. Lounsbury considered the advisability of adzing and boring railroad ties before they are given preservative treatment. It was shown that most ties are somewhat out of true, and must be cut and pared to give the rails a flat surface to rest on. This adzing of a treated tie cuts through a part or the whole treated shell and exposes untreated wood to the elements of decay. The same thing occurs when the tie is bored for the spike. By boring and adzing first and treating afterwards, no raw wood is exposed.

It is stated that of the 150,000,000 ties used annually in the United States, 74 per cent are hewed, and 24 per cent are sawed. The spike holds with more firmness if driven into a bored hole a little smaller than the spike, than if driven directly into the wood, hence the reason for boring.

The efficiency of piecework in handling ties and timbers was discussed by W. W. Eldridge of the Burlington & Quincy Railroad, who claimed that one-third of the men can be dispensed with, in converting a per diem crew into a piecework crew.

A technical paper was presented by F. M. Bond, of the Forest Products Laboratory of Madison, Wis., giving the result of tests made to determine the effect upon absorption and penetration of mixing tar with creosote. The conclusion was that tar hindered the penetration of the creosote.

Annual of American Forestry Association

The proposed placing of control of the national forests in the hands of the states was the question which commanded the greatest interest of the thirty-second annual convention of the American Forestry Association, which took place at the New Willard hotel, Washington, D. C., on Jan. 8. Gifford Pinchot, ex-chief forester of the United States, delivered an earnest address in which he attributed the movement to the various interests that, before the activities of the Forest Service were felt, reaped great personal aggrandizement from exploiting illegally the timber, mineral and grazing resources on the areas now within the forest reserves. Mr. Pinchot said that one of the greatest evils has come through the illegal acquisition of such lands by capitalists who operated under the timber and stone act. The method was to employ crews who took up quarter sections of land and after thus securing the title to the land conveyed it to the various people in question. Under the present supervision of the Forest Service the lands are sold outright and at figures commensurate with their real value. The real reason for the agitation in favor of state control is the fact that the Forest Service has been found incorruptible in its policy of honest administration and the interests in question have come to realize that they stand a better chance of securing their desired ends through the various state administrations if it can be arranged that the states have control of these vast resources.

Chief Forester Henry Solon Graves advocated a thorough educational campaign with the purpose of educating the public to the features of the government's land policy. The same education is necessary in connection with familiarizing the American public with the policy regarding the forest administration. He said:

"The only way to the conclusion that exists in the public mind relative to forestry and conservation. The greatest misconceptions exist in the public mind relative to forestry and conservation. Many seem to think that forestry is a single thing, and that it is a single thing. Others conceive of forestry as identical with park administration for scenic purposes; others would conserve forests only for watershed protection; another class will not concede that forestry means anything but good logging and good utilization; and there are a large number of persons and they make themselves prominently heard who believe, or pretend to believe, that forestry means locking up our timber resources, without present use, for future generations. In other branches of conservation there is even greater ignorance than in forestry. In fact it would not surprise me much if a certain amount of educational work would not be altogether lost on many persons right in this room. I wonder, for instance, how many appreciate the significance of the problem of regulating the public range and its relation to every day life; how many have an adequate idea of the fundamental questions underlying the present efforts to secure a right plan for the regulation of the use of waterpower sites on public lands and on navigable rivers.

President Henry S. Drinker of Lehigh University, the newly elected president of the forestry association, said that forestry has been styled "the keystone of conservation" but that in his opinion a more apt designation would be "the foundation or beginning of the conservation movement." Mr. Drinker outlined the work on conservation in Pennsylvania and more specifically at Lehigh University in the way of teaching forestry. He outlined the course of conservation from its infancy and showed the means through which its principles had been exploited. He said that the two enemies of forestry had been forest fires and unwise taxation. The country, however, has been awakened to the fire danger and there is no question, according to the speaker, but that an intelligent appreciation of the taxation evil is also growing. He recommended that the association consider the feasibility of devising a plan whereby a reasonable annual tax may be imposed upon timberland with a preferred tax upon timber to be assessed and paid when cut, in order to prevent the early cutting of timber by owners who claim that they cannot afford to conserve it under present taxation.

Walter L. Fisher, secretary of the Interior, spoke on the electrification of transcontinental railroads. He said that the grant of the Great Falls Power Company, a company which will supply power to electrify a section of the Chicago, Milwaukee & St. Paul railroad, is really the beginning of a policy to electrify 20,000 miles of transcontinental railroads.

In closing, the association elected new vice-presidents and directors.

A smoker was held in the evening, at which Representative Lamb of Virginia, chairman of the House Committee on Agriculture, said that there is no sentiment in Congress which would indicate that that body contemplates in any way turning over the control of national forests to the state. The speaker said that he personally opposed any measures that would act in opposition to the conservation policies of the government. Representative Lamb was followed by Representative Lever of South Carolina, who is the logical successor to the chairmanship of the committee on agriculture beginning with March 4 next. Mr. Lever expressed himself as having sentiments very similar to those of Mr. Lamb. He said that a liberal policy in connection with conservation movement would undoubtedly be followed out.

Philadelphia Wholesalers in Annual

The annual meeting and banquet of the Philadelphia Wholesale Lumber Dealers' Association came off at the Union League Club House on the evening of Jan. 9. Forty members and two guests, E. F. Perry, secretary of the National Wholesale Lumber Dealers' Association, New York, and Edward H. Coane of Philadelphia, were present. The banquet hall presented an attractive appearance with its lavish decoration of flowers and ferns, and the menu of the banquet suggested the famed Lucullus. A flashlight photograph was taken after all were seated.

Following the banquet, the meeting was opened by Horace A. Reeves, Jr., president, but nothing beyond the routine business and the election of officers came up.

Mr. Perry in a solicited speech touched upon the recent judgment of the United States circuit court in connection with the retailers' associations. He looks upon the verdict as given in a large measure to restrain the association from issuing or publishing a black list. Mr. Coane, a charter member of the association and now with the Pennsylvania Mutual Fire Insurance Company, in a short speech expressed himself as much surprised at the growth and advancement of the association—"the child had grown so big he hardly knew it."

There was no elaborate entertainment for the occasion, but in various groups much agreeable conversation was engaged in; pleasant reminiscences of the past year which had used them all well, and glittering prognostications as to what the year just entered upon held in store, furnishing the chief material. It was truly a social and good fellowship gathering and profoundly enjoyed it is declared by one and all.

New York State Forestry Association Meets

The Onondaga Hotel, Syracuse, N. Y., was the meeting place of the New York State Forestry Association, which met in annual session on Jan. 16. Following the address of welcome and a few introductory talks, Gifford Pinchot of Washington delivered a talk on "Forestry and the Nation," and Clifford R. Pettis, superintendent of forests of New York, talked on the subject of "The Administration of State Forests."

H. R. Bristol, superintendent of woodlands for the Delaware and Hudson Company, gave a talk on the subject of "Forest Mapping in New York."

Following a luncheon at the Chamber of Commerce, Frank L. Moore, president of the Empire States Forest Products Association, talked on "Forestry and the Lumberman." Other talks on branch associations, farmers interested in forestry, and the progress of forestry in New York were delivered at the afternoon session.

Meeting North Carolina Forestry Association

The North Carolina Forestry Association held its third annual convention at Raleigh, N. C., on Jan. 16. The meeting was well attended by prominent and interested people from all over the state, and many features having great bearing on the future forestry policy of the state were presented. Those in attendance represented the lumber trade, woodland owners, manufacturers of furniture and other lines of woodworking.

The program included addresses of welcome from the governor, the chairman of the County Board of Commissioners, the mayor of Raleigh and the president of the Raleigh Chamber of Commerce.

President E. B. Wright delivered the first address. His talk was followed by the appointment of committees, after which the reports of the secretary and treasurer were submitted. Reports from the executive and legislative committee were next in order, after which the Hon. Mark Porter, president of the Chicago, Cincinnati & Louisville Railroad and B. E. Rice, land and industrial agent of the Norfolk & Southern Railroad, talked on the "Railroads' Interest in Fire Prevention." Hon. R. R. Williams of Asheville, N. C., told about the proposed Mt. Mitchell state forest reserve.

Colonel S. H. Cohen, manager of the Greater Western North Carolina Association, spoke of "Forest Protection and the Development of Natural Resources."

The afternoon talks covered such subjects as "Observations on Forest Protection"; "The Lumberman and Forest Protection"; "Forestry Education"; "Furniture Manufacture and the Timber Supply"; "The County Fire Warden System"; "Chestnut Blight Investigation," and similar topics of special interest.

The evening session was taken up in an address by Henry Solon Graves on "Federal Aid in Fire Protection," and also reports of the various committees.

Meeting of the Memphis Lumbermen's Club

The principal features of the semi-monthly meeting of the Lumbermen's Club of Memphis, held at Hotel Gayoso January 18, were the decision to raise the dues of active members from \$10 to \$15, to adopt resolutions strongly favoring the appropriation of \$60,000,000 for the improvement of the Mississippi river in order that a recurrence of the disastrous flood damage of last year may be prevented, and the adoption also of resolutions asking the management of the Chisca Hotel to use red gum for the interior finish of the structure now being built here. The meeting was well attended. About fifty members were present.

The executive committee and the board of directors, at a meeting held a few days ago, recommended that certain changes be made in the constitution and by-laws with respect to the election of officers and also with respect to the holding of the annual banquet. This report was accepted and a committee consisting of George C. Ehemann, chairman, E. E. Taenzer, F. B. Robertson, J. W. McClure and F. E. Stonebraker, was appointed to investigate the proposed changes and report at a later meeting. The recommendation in regard to the banquet was that it might be held at any time, provided the necessary vote was recorded in favor of these and that it was made self sustaining. Each member is to be charged for himself and guest the exact cost of each plate.

The management of the Chisca Hotel has suggested that birch will be used for the interior, but the committee, of which W. B. Morgan is chairman, will use every endeavor to get the gentlemen who own this hotel to use red gum. This is due to the fact that it is felt that the use of gum in this structure will be a splendid advertisement for this wood. It is pointed out that the hotel owners of Memphis have profited largely by the patronage of the lumbermen and that they are under some obligations to them. The campaign in behalf of red gum has resulted in a wide expansion of the use to which this wood is put and the lumbermen here are anxious that this good work shall be continued.

The following new members were elected: Associate—J. N. Penrod and A. L. Jurdon of the Penrod-Abbott Lumber Company, Kansas City; Joseph Thompson of the Dudley Lumber Company, Memphis; R. E. Dickinson, general manager of the Anchor Saw Mill Company, Memphis, and Palmer Kellogg, southern manager of the Christianson Lumber Company, Chicago.

One application for membership was received and approved. This application will be voted on at the next meeting.

Chicago Gets Next National Meeting

The board of directors of the National Hardwood Lumber Association met in Chicago, Jan. 15. There were sixteen members in attendance.

The secretary reported thirty-eight applications for membership received since the meeting of Oct. 24, 1912. This makes a total of eighty-eight new applications since the last convention. On motion these eighty-eight were admitted to membership. It was decided to hold the next annual meeting of the association in Chicago on June 5 and 6, it being the unanimous consent of the board that the Hotel Sherman should be selected as headquarters, owing to the excellent service given on the occasion of the 1912 convention.

J. W. Dickinson of Memphis was appointed to fill the vacancy in the board of directors created through the death of the late E. E. Goodlander of Memphis.

The report was received from the chairman of the inspection rules committee, which stated that the final report was not ready for distribution, but that the inspection rules committee of the National Hardwood Lumber Association had been in conference for three days with the grading rules committee representing the Northern Hemlock and Hardwood Manufacturers' Association and the Michigan Hardwood Manufacturers' Association. Chairman Pritchard reported a very harmonious meeting and stated that as soon as final recommendations of his committee could be drawn up, they would be given out to the membership through the office of the secretary.

The secretary submitted a report of the official inspections for the month of December, 1912. The total amount inspected under the bonded certificate during 1912 was 171,823,339 feet, an increase of 44,462,891 feet over 1911.

Hearing of the Proposed Increase of Rates to Canadian Points

The Interstate Commerce Commission will hold a hearing on the proposed increase of rates from southern to Canadian points, at the Federal building, Cincinnati, Jan. 24. This is a continuation of the meeting held recently at St. Louis, at which time the railroad side of the question was heard. This meeting was held for the purpose of hearing the lumbermen interested in preventing the increases. The Lumbermen's Club has retained G. M. Freer, traffic manager of the Chamber of Commerce, to represent Cincinnati interests at the hearing and many lumbermen will likely attend and testify if necessary. It is understood that lumbermen from St. Louis, Nashville, Memphis and other parts of the South affected by the increases will be on hand to protest against the new order going into effect.

National Wholesalers to Meet at Atlantic City

At the last meeting of the board of trustees of the National Wholesale Lumber Dealers' Association, the sentiment was very strongly in favor of an eastern city, with Atlantic City as first choice, for this year's meeting place of the association. As a result Lewis Dill of Baltimore, Md., and E. F. Perry, secretary of the association, were instructed to visit Atlantic City and make the best possible arrangements for the coming meeting. March being one of the pleasantest months in the year at Atlantic City, the committee considers itself very fortunate in being able to secure accommodations for Thursday and Friday, March 6 and 7. The headquarters of the meeting place will be at the Hotel Chelsea. Pleasant and satisfactory arrangements have been made in every respect.

Details as to the program, banquet, entertainment, invitations, etc., are left in the hands of a special banquet committee consisting of F. E. Parker, president, N. H. Walcott, G. C. Edwards, W. W. Knight, F. R. Babcock and Lewis Dill.

It is believed that the arrangements when completed will so largely meet with general approval that the association will have a larger attendance of members and guests than ever before.

News of the Hardwood Manufacturers' Association

President W. E. DeLaney of the Hardwood Manufacturers' Association of the United States states that the effort that is being put forth by the association to attract many consumers of lumber to the annual convention to be held here at the Hotel Sinton, Feb. 4 and 5, is meeting with much success. A great many of the members of the association are sending special invitations to their customers, urging them to attend this big gathering of lumber manufacturers, and, judging from the many acceptances, a large number of consumers will be present. It is not the object of the association to get these users of lumber here for the purpose of selling them stock, but for the purpose of having them participate in the discussions that will follow the reading of a number of valuable and interesting trade papers. The question of inspection of lumber, so important to the consumer as well as the manufacturer, is one of the main topics in which the consumer will be requested to take an active part, and the knowledge to be gained by attendance at these conferences makes the trip worth while. The entertainment feature of course will not be overlooked and the delegates who attend are assured of not only plenty of interesting and valuable business discussions but plenty of fun during the interim.

The official convention badge to be used at the meeting of the Hardwood Manufacturers' Association of the United States, which will take place in Cincinnati, O., on Feb. 4 and 5, has been issued by that association. The simplicity and beauty of design of the badge is particularly striking. The association has made it a rule that its crest shall always be used prominently on badges, letter heads, literature, etc., and this has been found a desirable rule, as it firmly establishes in the minds of the trade the crest and the institution which it represents.

The badges are the compliments of Henry Disston & Sons, saw manufacturers of Philadelphia. Instead of being numbered in the usual way, each person receiving a badge is provided with a slip of paper upon which the delegate's name will be printed with pen and ink.

Knoxville Lumbermen Form Organization

At a get-together banquet of the manufacturers and wholesalers of hardwood lumber held at the Hotel Imperial, Knoxville, Tenn., Jan. 22, plans were made for a permanent organization to promote a closer

connection among the hardwood fraternity of that city. D. M. Rose, who acted as toastmaster, was made the permanent chairman of the organization, and E. M. Vestal was chosen secretary and treasurer.

A good number of the local lumbermen were present at the banquet and Lewis Foster, secretary of the Hardwood Manufacturers' Association of the United States, who was the guest of the meeting, was among the speakers of the evening.

The new association will next meet in the board of commerce rooms at three o'clock, Saturday afternoon, Feb. 15.

Two Philippine Woods

Two Philippine woods were recently shipped to the United States to be tried out for cabinet work. Forty thousand feet was lumbayo (*Tarrietia javanica*), a wood reddish brown in color, heavy, moderately hard, but said to be easy to work. Trees are of large size and abundant on some of the southern islands. Eight thousand feet of tanguile (*Shorea polysperma*) constituted the other shipment. This wood is also reddish brown, moderately hard, and is cut from large trees. It is said that a strong endeavor will be made to popularize these woods in the United States.

The Hardwoods of New South Wales

A talk on the hardwood timbers of New South Wales as delivered by W. H. Warren, L.L.D., of the University of Sidney, before the Society of Art at London was recently published in the Timber Trades Journal of that city. The article says:

"Over the greater part of the vast area comprised in the Continent of Australia forests are more or less distributed, which consist of trees yielding strong and durable timber. These, for the most part, are of the eucalyptus species, as well as some others, and are generally known as hardwoods.

"The average height to which eucalyptus attain in New South Wales is about one hundred feet, with a stem of from two feet to four feet in diameter. In jungle forests they have been known to reach a height of two hundred feet, and one hundred and fifty feet is not an uncommon height for more than one species to attain. But these heights sink into insignificance when compared with those of some allied species indigenous to Victoria, Tasmania and Western Australia. The Tasmanian blue gum (*Eucalyptus globulus*) reaches a height of three hundred feet, and the late Baron von Muella states, in his official record of trees, that a karri-tree (*Eucalyptus diversicolor*) of Western Australia, and also a fallen tree in the deep recesses of the Dandenong, Victoria, gave a length of three hundred feet, with a stem of proportionate diameter. I have seen trees in the Black Spur Range, Victoria, not far from the main road, which approximate closely to three hundred feet in height.

"The best time to cut down trees is after they have fulfilled their natural functions of leafing, flowering, and maturing their fruit, not when they are in full vigour of growth.

The durability of the timber derived from some of the trees is best realized by considering the experience of the Public Works Department in New South Wales, which gives the average life of timber bridges as twenty-five years, excepting the timber decks, which, in consequence of the wear caused by the traffic, last about twelve years.

"Until recently sufficient attention has not been given to the proper time of felling, and very little has been done in the direction of seasoning, so that the durability is not as great as would be possible if these matters were more carefully attended to. I have seen perfectly sound timber taken from old bridges, or piles in damp ground, which have been in use for periods varying from forty to sixty years. The strength and durability of timber depends to a great extent upon the locality in which the trees are grown. Timber, for example, of the same name and presenting the same general characteristics, but grown under different conditions in regard to temperature, geological formation of soil, the amount and the distribution of rainfall, whether grown on mountain ridges or in swampy, low-lying ground, differs widely in quality. Granite country does not appear to produce good timber in any part of Australia. Hardwood timber grown in swampy low-lying ground is generally defective in tenacity of fibre compared with the same timber grown at higher elevations, and where the geological formation is favorable. The chief objections to the use of timber in constructive work are its liability to decay from dry-rot, to the attacks of the white ant, and in marine work to the attacks of the teredo."

It is not to be inferred from the above article that it is in any way a recommendation of the soundness of the claims of the eucalyptus promoters in California. The condition prevailing in Australia is absolutely different in every way. Australia is the natural place of growth for the eucalyptus and timber referred to is not artificially grown, but is the virgin stand growing in its natural environment. We are not conversant with the exact physical qualities of the Australian eucalyptus but it is probably true that it can be used for such rough purposes as bridge timbers, poles, ties, etc.

Biltmore Doings for December

Dr. C. A. Schenck and the students of the Biltmore Forest School are enjoying an instructive trip through the German forests. On Dec. 4 the school left Darmstadt for a three weeks' trip into the forests of northern Bavaria, Saxony and Prussia. One of the points visited by the

school was the forest of Eichenwald located in the extreme north corner of Bavaria. This has been the scene of logging operations since 1616. The logs were at that time rafted down the Main and Rhine rivers. The forest has been a part of the main north German district suffered from a great windfall. Immediately logging on a large scale was imperative and to this end a large number of small mills were brought into the district. To the present day these small mills are operating along the rivers and the government supplies them with logs at a price fifteen per cent below that which they would fetch in the open market. At the present time the logs are driven down the numerous small streams by the help of splash dams maintained by the government. During the last twenty years but one fire has occurred in this district and it burned over but three acres. Here is shown an excellent example of the close application of modern forestry. The annual cut is about equal to the annual increment, namely about seven hundred feet per acre per year. The price of good stumpage is from \$17 to \$20 while twenty years ago it was only \$7.50 a thousand feet.

On Dec. 9 the school arrived at the Academy of Tharandt, the "Mecca" of foresters. The academy was founded in 1810 by the greatest of all foresters, Heinrich von Cotta, as a private school, but was later taken over by the Kingdom of Saxony. At this school can be found more information regarding forest finance and its practical application to the forest than at any other place. During the stay at Tharandt the students were privileged to attend special lectures delivered by some of the most prominent men in forestry circles. During one of these lectures,—that given by Professor Wislicenus, it developed that he had been able to produce artificially from minerals perfect fibre having the characteristics of real wood fibre.

The students were also told of a method of surveying by the use of a camera whereby, instead of reading the angles by eye with the aid of a transit, the work is done with a specially constructed camera.

One of the last trips made in the month of December was to Eberswalde, near Berlin, where the largest and best equipped forest school in the world is located. The students were here privileged to hear lectures by Professor Schubert on meteorology, which explain the effects of forests on rainfall, temperature and humidity.

The school will return to the United States on the steamer New Amsterdam, sailing Mar. 15, 1913.

Liverpool Concern Expands

Gilbert Y. Tickle of Tickle, Bell & Co., 523 Royal Liver building, Liverpool, announces that he has taken into co-partnership his son, Ernest W. Tickle. The company will continue in business as mahogany and fancy wood brokers under the old firm style. The company has been in business for the last eleven years and is recognized as one of the foremost of the Liverpool lumber merchants.

Bird's-Eye Veneer Company Organized in Escanaba

The Bird's-Eye Veneer Company is the style of a new concern recently incorporated under the laws of Michigan, and organized to do business in the manufacture of veneers at North Escanaba, Mich. The company started the erection of its new plant on December 23, the site being near that of the National Pole Company's plant.

The corporation is capitalized at \$60,000 and has the following officers: J. C. Kirkpatrick, president; C. T. Tuxford, vice-president; C. C. Patterson, secretary and treasurer. The company is made up of practical lumbermen and will specialize in bird's-eye maple veneer. The business will be in direct charge of Mr. Tuxford as general manager. Mr. Tuxford is a veneer producer of twenty-four years' experience, who located at Escanaba four years ago, having been since then in charge of the Escanaba Veneer Company's plant.

While the company will specialize in bird's-eye maple of fine quality for furniture and interior finish, it will also work up birch, plain maple and basswood. Mr. Tuxford has already made contracts for a supply of logs for the coming season.

The buildings being erected consist of the main structure, 100x360 feet, and the wing, 40x237 feet, which will be two stories high. The boiler house will be 40x90 feet. The plant also includes boiling vats and other necessary features. Work will begin with two machines, but it is expected that the equipment will be increased rapidly. Provision has been made in the plans for large additions to the works.

The Chicago & Northwestern Railroad is connected with the mills by switch, and the Escanaba & Lake Superior Railroad is now installing a switch to connect with its tracks. It is expected that the plant will be ready for operation about the first of April.

Lancewoods of Commerce

The true lancewood of South America is a slender tree, found in tolerable abundance in the interior of British Guiana. It grows from four to six inches in diameter at the lower end, and from fifteen to twenty feet high. It was originally referred by Schomburgk to *Dugetia quitarensis* Lind. Robert Thomson, who was at one time superintendent of the Government Botanic Gardens, Jamaica, called it *Oryandra virgata*—*Guatteria virgata* Dun. This tree had been previously described, however, by Bentham and Hooker, who referred it to the genus *Bocagea*. In French Guiana the tree is known as jejerecou, and by their botanist is referred to as *Xylopia*. The native name of the wood is yari-yari. In Trinidad the lancewood is said to be produced by *Rollinia sieberi* Dec., and the average

diameter of the trunk of a full grown tree is one foot. There would appear to be two varieties of lancewoods in British Guiana. The carisiri, swamp, or black lancewood, attains to a height of fifty feet, and is seldom more than four to eight inches in diameter. It is remarkable for growing with but little taper. It is in great repute, being superior to the closely allied yari-yari, arara, or yellow lancewood, which is somewhat smaller and grows in the hills.

The true lancewood (*Bocagea virgata* B. & H.) also grows in Jamaica, where it is called black lancewood. It forms an erect tree attaining a height of thirty feet, with a diameter of from nine to twelve inches, and is found in the woods of the central and western parishes. The wood possesses great elasticity, and on that account is exported for making carriage shafts, lances, spars, fishing rods, ramrods, and general turnery.

The white lancewood (*Bocagea laurifolia* B. & H.) occurs in Jamaica and other islands of the West Indies. This tree grows to a height of fifty feet or over, with a trunk diameter of from twelve to eighteen inches or more. It is used to some extent but is not nearly so valuable as black lancewood.

Tenasserim lancewood is said to belong to the dogbane family of plants, and is therefore entirely unrelated to the true lancewood (*Bocagea virgata*) of commerce. It is a tree which produces a timber possessing the properties of the genuine kind and is quite common in the Tenasserim provinces. It is used for bows, spears, chisel-handles, etc. It is tough, hard, elastic, and very durable, capable of a beautiful polish, and makes excellent furniture. The direct rays of the sun badly fade and check the wood.

Lancewood would be preferable to hickory for shafts commonly used by American carriage builders, but it is difficult to obtain and very expensive. For wooden side bars, now so popular in connection with light road wagons, lancewood would doubtless prove the best for this purpose, and come into general use, were it not for its expense, and the difficulty of obtaining it in sufficient quantities, for it possesses those qualities particularly demanded for side-bars, namely, stiffness, toughness, and elasticity. The wood is used for gig shafts, archery bows, billiard cues, and, when small, for whip handles and fishing rods. The Indians make their arrow points of it.

The value of imports of lancewood into the United States from 1900 to 1910 inclusive is as follows:

1900.....	\$1,935.00	1905.....	\$ 535.00
1901.....	343.00	1906.....	811.00
1902.....	1,129.00	1907.....	1,616.00
1903.....	4,087.00	1908.....	1,545.00
1904.....	4,151.00	1909.....	691.00
1910.....	\$3,077.00		

Substitute for Lignum-Vitæ

The scarcity and high cost of lignum-vitæ bar it from a number of places which it is well fitted to fill. The principal supply comes from the West Indies. It is very hard, and one of its most common uses is as gudgeons and bearings of wheels that turn slowly. Bulletin 9 of the Philippine Bureau of Forestry was recently issued from the Bureau of Printing at Manila, for the purpose of acquainting the public with a Philippine wood which it is claimed is a satisfactory substitute for lignum-vitæ. It is known as mancono (*xanthostemon verdugonianus*). Its air-dry weight is from eighty to ninety pounds per cubic foot. The wood is fairly plentiful, the quantity in sight being between five and six million cubic feet. It is rated as the hardest and heaviest of Philippine woods. The Bureau of Forestry at Manila announces that it will send samples free to interested parties on request. The bulletin was prepared by I. W. I. Hutchinson, forester.

Sugar From Wood

It is claimed that a process has been perfected in England for making sugar from wood. According to accounts, sawdust is treated in closed retorts with a weak sulphurous acid solution and the resulting product contains about twenty-five per cent of sugar. It is useful as a feed stuff and as a material for the manufacture of spirit. A factory capable of treating 200 tons of sawdust per week could turn out between 300,000 and 400,000 gallons of proof spirit per annum, besides other valuable by-products. There is no account of the effect on live stock which eats this wood sugar. It might be well enough to let the English try it on their horses and cattle first.

Making Wooden Combs in the Philippines

Thousands of wooden combs are made annually in the Philippine Islands and are a staple article on the market. The best grade is made out of the hard, heavy, fine-textured and very dark heartwood of "Philippine ebony" or *camagon* (*Diospyros discolor*); the cheaper ones from the grayish or reddish sapwood of the same species. Most of the combs are worn by native women. The process of making is very simple. The green wood is sawed into sections of convenient length and then split into thin tangential slabs. The latter are dried over a smoldering fire of sawdust held in an earthen vessel. The outline of the comb, usually curved at the back, is drawn in pencil on the slab, which is then clamped in a vice for sawing. The teeth are sawed out first and afterward the back of the comb is cut away. Polishing is done with sandpaper or rough leaves. While most of the combs are plain some are curved or engraved, the instruments used for the purpose being a sharp, pointed knife, a small graver's tool, or even a section of umbrella rib brought to a point.

Diseased City Trees to be Investigated

The State College of Forestry at Syracuse, N. Y., has taken up the work of investigating the causes which produce disease and death of city and park trees, and it will probably extend its investigation to forests. Planted trees in parks and along streets have some advantages over their wild kindred in the native woods, but there are disadvantages also. Fungus and insects attack the trees with increased persistence, and smoke, escaping gas and dust, which are generally wanting in the forest, often lower a city tree's vitality, or destroy it entirely. The first step with investigation will consist in discovering the causes of tree diseases, and the second step will seek a remedy.

F. A. Diggins Improving After a Serious Illness

Fred A. Diggins of Murphy & Diggins and the Cummer-Diggins Company, Cadillac, Mich., and ex-president of the National Hardwood Lumber Association, has been confined to his bed in a serious condition. In fact at one time his condition was so serious that it was feared he would not survive until morning. A letter from J. C. Knox, of Cadillac, advises, however, that Mr. Diggins' condition is materially improved. The trouble resulted from an attack of grippe, which developed into pneumonia and later affected his heart. The latter condition was the grave cause for anxiety. Mr. Diggins has been about as close to the border line as a human being usually goes and comes safely back. While he is not entirely out of danger, his condition is improving every day and it is anticipated that he will soon be in his usual place of business.

Penrod-Jurden-McCowan Lumber Company Organized

The Penrod-Jurden-McCowan Lumber Company is the style of a new incorporation which has been organized at Kansas City, Mo. The company has a paid up cash capital of \$135,000 and is equipped with mills at Brasfield, Ark. The officers of the company are J. N. Penrod, president; H. A. McCowan, Salem, Ind., vice-president; R. L. Jurden, secretary, treasurer and general manager. R. H. Brown of Brasfield is resident manager.

The company succeeds the affairs of the Penrod-Abbott Lumber Company at Brasfield, which concern was operated as a copartnership, but at the death of Frank P. Abbott of Goshen, Ind., it became necessary to incorporate the business. The company owns large tracts of hardwood stumpage, principally gum and oak, on the Cache river.

It is estimated that the timber resources are adequate for ten years' run. The plant is equipped with a nine-foot bandsaw and resaw, and is cutting about 45,000 feet, log scale, per day. The general office will as heretofore be maintained at Kansas City.

Acquires Land For Forestry Demonstration

The New York State School of Forestry of the Syracuse University, Syracuse, N. Y., has just acquired a gift of an interesting tract of timber for use as a forest experiment station. The tract includes one hundred acres of forest in the Catskills near Tannersville, N. Y. This is the second gift to the college within a year, the first having been a tract of eighteen hundred acres of cutover lands in the neighborhood of the school. In the spring the college will put a forester onto the tract and will maintain there for all time a research station. It will be used for educational purposes by the various classes of the college, and have a camp there during the summer.

A Valuable Book

Albert C. Righter, who for several years has been secretary of the Retail Lumber Dealers' Association of Pennsylvania, is the author of a new book, "Some Fallacies of our National Government." The book contains twenty-five chapters and among the more suggestive topics treated in them are the following: "The Trust Question," "Yellow Journalism," "The Great Curse," "The Forgotten Millions," "The Remedy and Victory" and "What Would Lincoln Do?" The book contains many personal experiences of the author. It takes up in considerable detail the troubles of the retail lumber dealers in this country, especially in connection with the recent investigation of the so-called lumber trust. The work is well illustrated throughout and contains many suggestive ideas along the leading social and economic questions of the day.

The Lumber Law Review

The Lumber Law Review for December, 1912, was recently issued from the offices of the National Lumber Manufacturers' Credit Corporation. The bulletin contains the usual quota of information valuable to the lumberman in connection with his business, particularly as far as the legal phases are concerned. The feature of the bulletin is the summary of the status of the right of stoppage in transit, which is of so much importance to and so little understood by the average lumberman. Other cases coming in for a discussion cover the question of place and time of delivery involving rejection by buyer; the remedy of buyer in connection with breach of contract; action for breach of contract where goods are left in the custody of sellers; breach of contract by seller involving measure of damages; remedy of seller involving action for breach of contract and re-sale.

Shipbuilding and Shipping for 1912

The annual report of the Bureau of Navigation of the United States Department of Commerce and Labor shows that there was an increase of 135 in the number of vessels of all classes constructed in the United States during the year 1912. There was, however, a notable decrease in total tonnage.

During the year there were constructed in the United States 1,427 vessels, with a total tonnage of 292,477 tons. The figures for 1911 show that 1,592 vessels were constructed, totaling 309,640 tons. The steam vessels of steel construction showed a decrease in 1912 over 1911, while steam vessels of wooden construction showed an increase.

From British sources official reports are published which confirm the prediction for the year 1912 that it would be the most disastrous for shipping since marine insurance began, nearly two-and-a-half centuries ago. The known losses aggregate \$35,000,000, and it is believed that when the undetermined claims are made, the loss will reach \$40,000,000. This includes casualties to vessels not exceeding 500 tons, which numbered 6,061.

Leases Cincinnati Yard

The Johns Mowbray Nelson Company, wholesaler of hardwood lumber with offices in the Provident Bank building, Cincinnati, O., has leased yard space from the Chesapeake & Ohio Railroad. The location of the yard will be at the corner of Eighth and Horn streets, Cincinnati, at the lower end of the McLean avenue lumber district. It is expected that it will afford room for piling five million feet of lumber.

The Chesapeake & Ohio Railroad will install a private switch for shipping. R. W. Lucius, southern manager for the company will be placed in charge of the yard office.

This step is a further demonstration of the fact that the Johns-Mowbray-Nelson Company is growing and growing fast.

National Inspection for December

The inspection bureau of the National Hardwood Lumber Association has issued a statement of inspection for the month of December, 1912, through President Charles H. Barnaby and Secretary F. F. Fish. The report shows a total of 15,890,954 feet of hardwood lumber inspected under the bonded certificate of the association for the month. This is an increase of 5,275,753 feet over December, 1911. During the year 1912 the increase in inspection work exceeded all previous records.

The statement of inspection by months follows:

	Feet
January, 1912.....	9,780,831
February.....	9,194,333
March.....	9,045,383
April.....	11,213,270
May.....	12,187,874
June.....	13,249,177
July.....	15,909,500
August.....	18,041,552
September.....	20,639,850
October.....	19,489,975
November.....	17,180,640
December.....	15,890,954

Total for 1912.....171,823,339

The total amount inspected during the year 1911 was 126,360,448 feet. Thus the gain in inspections for the year 1912 over 1911 was 44,462,891 feet.

at a loss seven months of the year, and at a profit five months of the year. The company has a capital of \$150,000 and has as its officers: President, Jerome H. Sheip; first vice-president, H. S. Best; second vice-president, S. S. Koller; secretary, Stanley S. Sheip; treasurer, W. H. Ramsey. The company takes over the whole business heretofore carried on by J. H. Sheip, composed of the cigar box lumber plant at Choctaw Point, Mobile, Ala., and his wholesale lumber business in Philadelphia.

A Sixtieth Wedding Anniversary

In the Pasadena Cal. Star of Friday, January 3, 1913, an article was given of the sixtieth wedding anniversary of Mr. and Mrs. L. V. Boyle, the celebration taking place at their attractive home. Mr. and Mrs. Boyle are approaching the eighty-fourth milestone along life's way, and they received numerous letters, telegrams and presents, with a number of callers. In the evening there was a charmingly appointed dinner party. An informal reception was held after the dinner and the hosts were presented with a handsome cake with sixty candles from the members of the Westminster Presbyterian church. Numerous other gifts were also received. The house was decorated with crimson carnations, Christmas bells and greenery, with an especially pretty arrangement for the table. Covers were laid for sixteen and among them were Mr. Boyle's sons and daughters now residing in California. Mr. and Mrs. Boyle were married sixty years ago in Indiana, and for a great many years Mr. Boyle was a prominent lumberman in the hardwood trade. He operated in walnut for a number of years in Indianapolis and later on operated at O'Brien, Tenn., and Boyle, Miss. He moved to California about twenty years ago. Since that time he has been living in Escondido and at Pasadena. The only absentee from the wedding was his son Clarence Boyle, who is connected with D. K. Jeffris & Co., Chicago. Mr. and Mrs. Boyle are in excellent health, enjoy life, and have promise of many more years of happiness.

Change in Philadelphia House

Jerome H. Sheip, Incorporated, was chartered under Pennsylvania laws Jan. 4, 1913. It is capitalized at \$150,000 and has as its officers: President, Jerome H. Sheip; first vice-president, H. S. Best; second vice-president, S. S. Koller; secretary, Stanley S. Sheip; treasurer, W. H. Ramsey. The company takes over the whole business heretofore carried on by J. H. Sheip, composed of the cigar box lumber plant at Choctaw Point, Mobile, Ala., and his wholesale lumber business in Philadelphia.

Jerome H. Sheip, for many years of Sheip & Vandegrift, and the Philadelphia Veneer and Lumber Company, is one of the best known and liked men in the business; a man who has made a study of the cigar box lumber for many years, and his reputation in the trade for honest dealing and all time reliability has made him one of the most respected of business men.

H. S. Best, a practical lumberman, came from Williamsport, Pa., a few years ago, where he was employed as superintendent by the Central Pennsylvania Lumber Company, and associated himself with the Sheip concern, becoming manager of the Mobile plant. He is reputed one of the best hardwood manufacturers in the country.

Stanley S. Sheip, son of the president, after his graduation from Harvard College, a few years ago, adopted the business of his father, which he has learned from the ground up. He is now secretary of the new company, with headquarters at Mobile.



JEROME H. SHEIP, PRESIDENT JEROME H. SHEIP, INC., PHILADELPHIA, PA.



H. S. BEST, FIRST VICE PRESIDENT JEROME H. SHEIP, INC., PHILADELPHIA, PA.



STANLEY S. SHEIP, SECRETARY JEROME H. SHEIP, INC., PHILADELPHIA, PA.

Hardwood News Notes

< MISCELLANEOUS >

B. J. Goodman of Forsyth, Mich., has incorporated his business at \$75,000 and will operate under the style of the B. J. Goodman Lumber Company.

The Grand Rapids Molding Company has been succeeded by the Klise Manufacturing Company, incorporated at Grand Rapids, Mich., with a capital of \$25,000.

The Sherana Benningfield Lumber Company is the name of a new concern incorporated at Hoxie, Ark., for \$25,000.

The Modern Cabinet Company is the style of a recently incorporated Indianapolis concern which is capitalized at \$35,000.

The Fox & Mason Furniture Company of Corunna, Mich., has increased its capital stock to \$300,000.

The Public Cedar Company has been incorporated at Escanaba, Mich., at \$10,000.

The Hillsdale Lumber & Coal Company of Hillsdale, Mich., has increased its capital to \$17,000.

M. H. Hand of Plymouth, Wis., has incorporated his business under the name of the M. H. Hand Lumber Company.

The Hale Mylrea Lumber Company has been organized at Wausau, Wis., with an authorized capital of \$12,000.

The Moline Plow Company of Moline, Ill., has increased its capital stock from \$9,000,000 to \$30,000,000.

The Peoria Casket Company has been incorporated under that style at Peoria, Ill., having capital of \$100,000.

The Bockstge Furniture Company of Evansville, Ind., has increased its capital from \$60,000 to \$120,000.

Fire recently caused \$25,000 loss to the Saginaw Basket & Veneer Company, Saginaw, Mich. The plant was insured.

The Indiana Hardwood Flooring Company has been incorporated at Indianapolis with a capital stock of \$5,000.

The Texas Hardwood Lumber Company was recently incorporated at Warren, Ark., at \$75,000 to manufacture hardwood lumber.

The Hoskins Lumber Company, operating saw and planing mills at Mt. Gilead, O., has been incorporated at \$10,000, by M. M. Hoskins, Morris W. Kline, Ethel Eder and J. W. Barr.

The Wells-Davis Manufacturing Company has been incorporated at Richmond, Va., by J. W. Jefferies of Midlothian, Va.; R. H. Bruce and R. B. Davis, Chester, Va. The company will engage in the lumber business.

The Wheelley Spoke Company has been organized at Wheelley, Ark., with an authorized capital of \$10,000.

A recent New Jersey incorporation is the Newark Toy & Novelty Manufacturing Company, which will operate at Newark, with an authorized capital of \$50,000.

The Midland Manufacturing Company will operate at LaPorte, Ind., with a capital of \$25,000.

A new furniture manufacturing company is the Commonwealth Manufacturing Company, Gardner, Mass., capitalized at \$150,000.

The North Arkansas Tie & Timber Company has been incorporated at Leslie, Ark., with a capital of \$200,000.

The Rust Manufacturing Company recently began business at Lomax, Ill., and will manufacture ironing boards and stepladders.

At Kansas City, Mo., the Kansas City Flooring Company has increased its capital stock from \$50,000 to \$100,000.

The Manhattan Grill Company is the style of a new concern which has started operations in New York City for the purpose of manufacturing grill work. The company has \$10,000 capital.

The Williams Fulgham Lumber Company is the style of a new incorporation at Asheville, N. C. This company has \$25,000 capital stock.

The new hardwood mill of the Howell Brothers Company of Junction City, Ark., started cutting on the first of the year. This mill replaces one destroyed by fire about three months ago. The plant is equipped with two circular saws and a resaw, and has a capacity of 65,000 feet per day. H. T. Howell is president of the company.

The Arkansas Short Leaf Lumber Company of Pine Bluff, Ark., will shortly begin the erection of a hardwood mill, which it will operate in connection with its pine mill at Pine Bluff. A separate company will be organized to operate the hardwood plant, which will have a capacity of 60,000 feet per day. An oak flooring mill will also be established in connection with the hardwood plant.

The Giles Brothers Hardwood Company is the style of a new concern which will shortly complete the construction of a hardwood sawmill at Forest Hill, La. The mill will have a capacity of 35,000 feet per day. The machinery is already being installed.

Commissioner F. K. Lane of California was elected on Jan. 8 to succeed Commissioner Charles A. Prouty as chairman of the Interstate Commerce Commission for the year beginning January, 1913. Mr. Lane has been a commissioner since 1905.

The C. K. Kyles Veneer Company is the style of a new concern that has been organized at Mobile, Ala., to manufacture and deal in wood products. The company has a capital stock of \$10,000. Its officers are C. H. Kyles of Mobile, president; N. G. Harding of Chicago, vice-president, and A. L. Kridler, of Mobile, secretary and treasurer.

The Baskin Lumber Company of Baskin, La., has purchased 22,000 acres of hardwood timber near Baskin from John W. Kesterson. It is expected that the Baskin company will begin cutting its timber immediately.

The Kendall Lumber Company of Pittsburgh will in the spring begin exploiting the tract of timber known as the "Chess" tract near Morgantown, W. Va. Plans have been completed for the installation of necessary equipment, and a new railroad will be built up Cheat river by the Kendall company. This will be completed by spring. Timber operations will begin about April 1.

The Chicago Mill & Lumber Company has purchased 12,000 acres of timber in Phillips county, Arkansas, which it is estimated will yield 60,000,000 feet of hardwoods. A sawmill will be erected for manufacturing the timber, which runs principally to oak, ash, hickory and gum.

A concession of timberlands containing approximately 60,000 acres was granted by the Bureau of Forestry at Manila. The concession is a twenty-year exclusive license agreement. The Manila Sawmill Company was the successful bidder for the privilege. Acting Director of Forestry W. F. Sherfese has announced the granting of the new timber concession in the Philippines, which under certain conditions will involve a capital investment of not less than \$550,000. This tract borders on Ragay Gulf. It was advertised for competitive bids several months ago, and the grant was finally made to E. J. Lane, who has associated with him in the enterprise capitalists and timber operators in British Columbia and northwestern United States.

The Hamilton Ridge Lumber Corporation is the style of a new company which will operate at Richmond, Va., with a capital of \$50,000 to \$100,000. The officers are J. R. Paschall, president; C. Boice, vice-president; James Mullen, secretary; Thomas Gresham, treasurer, all of Richmond.

The Park Falls Manufacturing Company's veneer and sawmill at Park Falls, Wis., had operated only a few days after having been closed down for repairs when the plant was totally destroyed by fire of unknown origin. The loss is estimated at \$50,000, with insurance to the extent of \$26,000. It is reported that the plant will be rebuilt as soon as possible and that the fire will not interfere with log buying.

The new factory at Munising, Mich., styled the Munising Veneer Company, is now employing more than fifty men and has orders enough ahead to keep the plant at full capacity for some time. At present the chief products are door stock, automobile dash boards and piano pin blocks. Birch and hard maple are the principal woods used. The officers of the new company are: Wm. G. Mather, president, Cleveland; William Chandler, vice-president, Sault Ste. Marie; Sherman T. Handy, secretary, Sault Ste. Marie; A. R. Dow, treasurer; G. A. Whitmeyer, general manager, Munising. Mr. Whitmeyer formerly managed several fine veneer plants in New York state.

< CHICAGO >

It is announced that the Chicago office of the Forest Service, United States Department of Agriculture, will be moved from the Fisher building to the Federal building, on Jan. 31.

H. B. Darlington, vicegerent snark of the Northern District of Illinois of Hoo-Hoo, has sent out invitations to the members of that branch of the organization to attend the concatenation to be held at the Hotel Sherman, Chicago, Tuesday evening, Feb. 12, at 9:09.

G. C. Cremer, president of the Cremer Lumber Company of St. Louis and Crossett, Ark., has been in the city several days completing arrangements for starting his immense new hardwood operations at Crossett, Ark. The new company has one of the finest and largest hardwood plants in the country and is amply provided with hardwood stumpage and capital. It is expected the company will have lumber for shipment in May.

H. H. Barclay, formerly Rochester manager of the Wood-Mosaic Company of New Albany, Ind., now manager of the Standard Mills, Ltd., which is located about sixty-five miles north of Montreal, called at HARDWOOD RECORD's offices Jan. 17. Mr. Barclay's new concern manufactures birch and maple flooring.

T. M. Brown of the W. P. Brown & Sons Lumber Company, Louisville, spent a few days last week in Chicago in attendance at the meeting of the directors of the National Hardwood Lumber Association.

R. S. Kellogg, secretary of the Northern Hemlock and Hardwood Manufacturers' Association, Wausau, was in Chicago on Jan. 14.

J. L. Benas, vice-president of the Waldstein Lumber Company, St. Louis, spent several days of last week in the city.

H. F. Below of the Vollmar & Below Company, Marshfield, Wis., spent most of last week in Chicago on business.

M. L. Pease of the Galloway-Pease Company, Saginaw, Mich., and Poplar Bluff, Mo., made one of his regular selling trips to the local market the early part of last week.

A new company recently organized at Chicago is the Chicago Maple and Oak Flooring Company, with a capital of \$100,000. The incorporators are John J. Nichols, Vernon E. Nichols, John M. Nichols.

J. T. Edwards, president and sales manager of the Medford Lumber Company, Medford, Wis., was in the city last week in conference with local representative, the Hardwood Mills Lumber Company.

Gardner I. Jones of the Jones Hardwood Company, Boston, Mass., called at HARDWOOD RECORD offices on Jan. 15. Mr. Jones was in the city in attendance at the meeting of the directors of the National Hardwood Lumber Association.

Dr. C. A. Schenck, director of the Biltmore Forest School, and head of C. A. Schenck & Co., timber experts and cruisers at Biltmore, N. C., has just issued a pamphlet describing the character of work done by that concern. The pamphlet is a decided work of art in every way and, contrary to the usual literature gotten out by concerns of this character, it is an excellent exposition of the possibilities of modern advertisement writing. It should certainly be secured by any individual or company contemplating cruising work of any character.

"Practical Country Buildings" is the title of a booklet gotten out by R. S. Kellogg, secretary of the Northern Hemlock and Hardwood Manufacturers' Association of Wausau, Wis. The book is a handbook of economical and common-sense plans and details for the construction of dwellings, barns, stock and implement sheds, ice houses and all types of farm construction. It is compiled by Wm. A. Radford, president of the Radford Architectural Company. Mr. Radford is also editor-in-chief of the American Carpenter and Builder, the Cement Works and other publications equally well known in building and architectural circles, and the author of many standard books pertaining to the building industry. The book is issued by the association as a follow-up in the advertising campaign on hemlock. Five thousand copies are being sent to farmers who answer the ads and to retail lumber dealers in the territory to which hemlock is chiefly shipped.

At the sixteenth annual of the Southern Illinois Retail Lumber Dealers' Association at Alton, Ill., Hoo-Hoo will hold a concatenation. The dates of the convention are Jan. 29 and 30, and the concatenation will come on Jan. 30.

G. H. Holloway of the Holloway Hardwood Lumber Company, Great Northern building, Chicago, just returned from a two weeks' trip to Arkansas and Tennessee mill plants. Mr. Holloway reports that while in some cases flood conditions have made shipping difficult, he encountered little trouble from this cause.

The proceedings of the forest fire conference of the Western Forestry and Conservation Association as held in Portland, Wash., Dec. 2 and 3, have been compiled in pamphlet form, copy of which has been received at HARDWOOD RECORD offices.

W. M. Stevenson, Supreme Scrivenor of the Hoo-Hoo, has been in Chicago for several days.

E. C. Mershon of Saginaw, Mich., called at HARDWOOD RECORD offices on Jan. 22. Mr. Mershon was in the city for the day only, being en route to the Pacific coast, where he will meet his wife.

R. H. Darnell, associated with R. J. Darnell of Memphis, Tenn., was in town on business Jan. 22.

J. W. Wyatt of Memphis, Tenn., was one of the southern visitors to the city during the past week.

W. H. Schleyer of the Kosse, Shoe & Schleyer Company, Cincinnati, O., spent a couple of days in the past week with the local trade.

J. Downs of Downs Brothers, hardwood sawmill operators with headquarters at Rochester, Ind., left for home on Wednesday of this week after having made a business trip of several days' duration in the city.

The William Lorimer Lumber Company has been incorporated under the laws of Illinois to do a wholesale lumber business in Chicago with a capital of \$200,000.

The Fink-Heidler Company of Chicago has increased its capital stock from \$25,000 to \$50,000.

J. I. Nichols of the Nichols & Cox Lumber Company, Grand Rapids, Mich., spent several days of this week in the city.

◀ NEW YORK ▶

W. G. Donald is the new manager of the New York office of the Simonds Manufacturing Company with headquarters at 40 Murray street, Manhattan. He succeeds the late L. A. Kimball, who had been in charge of the local office for a great many years. Mr. Donald has been with the Simonds Manufacturing Company for some time and formerly traveled in one of the Middle State territories. He is an experienced saw and knife man and the Simonds' customers will find him possessed of a fund of useful saw knowledge.

S. E. Slaymaker of S. E. Slaymaker & Co., hardwood wholesalers, 200 Fifth avenue, is planning to leave for Pinehurst and Palm Beach on a pleasure trip. R. U. Shaeffer of the Slaymaker forces has been ill with typhoid, but is now convalescing.

E. M. Stone of the Travis Lumber Company, Huntsville, Tenn., was a recent visitor in New York. His company is operating in hardwoods and making a specialty of yellow poplar and oak.

Frank P. McNulty, Incorporated, 2 East Forty-second street, for some time identified with the local wholesale hardwood trade, is in liquidation.

The National Wholesale Lumber Dealers' Association will hold its annual convention at Atlantic City, N. J., March 6 and 7, according to announcement from headquarters last week. The Hotel Chelsea has been selected for the meeting place and headquarters of the association.

Robert Yeager, president of the National Lumber Manufacturers' Association headquarters, Chicago, Ill., who is on an eastern trip in connection with association matters, spent several days in town recently.

◀ BUFFALO ▶

Robert Yeager, president of the National Lumber Manufacturers' Association, was in Buffalo on Jan. 14, on which occasion he was presented with a gold watch. The dinner marked Mr. Yeager's retirement as president of the chamber and the diners numbered about seventy-five. Many tributes were paid to Mr. Yeager's activity as president, to which he responded, showing his appreciation of the good will shown.

A committee representing the Automobile Club of Buffalo appeared before Gov. Sulzer on Jan. 16 to urge upon him the reorganization of the state highway department. The committee was headed by the newly-elected president, M. M. Wall. The permanent placing of highway improvement in the hands of efficient engineers, rather than politicians, was advocated.

President W. L. Sykes of the Emporium Lumber Company was in Washington recently, where he attended the convention of the American Forestry Association. He is also taking a part in the organization of the New York State Forestry Association, which has just been organized, a meeting for the purpose having been held at Syracuse on Jan. 16.

The Ideal Furniture Company, East Jamestown, suffered a loss of several thousand dollars on Jan. 14 by fire, caused by spontaneous combustion.

Scatcherd & Son report the New York building and door situation very active. The reason they are so well posted on this is that the Batavia hardwood door mill, in which they are interested, is doing a large business there.

J. B. Wall recently spent several weeks in Michigan closing up some timber contracts. The yard continues to receive hardwood stocks of good size from the South.

W. P. Miller of Miller, Sturm & Miller has been shipping to the local yard from the West stocks of plain oak, which are in such good demand as to remain a very short time unsold.

F. M. Sullivan spent about ten days of January in the West, chiefly in Michigan, where he bought some lumber. Mill stocks are reported to be advancing, particularly maple.

Blakeslee, Perrin & Darling state that the hardwood trade is quite good and most woods seem to be moving freely. A particularly good demand has developed for cypress.

Anthony Miller states that the hardwood trade is not rushing, but is fairly active. He has lately been adding to his stocks of hardwoods, especially in oak, poplar and cherry.

Angus McLean has returned to Bathurst, New Brunswick, after spending some days in this city. Hugh McLean is back from a trip eastward, including New York and Philadelphia.

G. Elias & Bro. report the month of December as having been better than usual in volume of hardwood sales. Trade has also been very fair during the month of January.

H. A. Stewart of I. N. Stewart & Bro. is spending most of January in shipping lumber at Charleston, W. Va. Oak has been selling freely. Low-grade basswood and chestnut are in good demand.

The National Lumber Company has been getting in a good deal of flooring of various sorts and reports prices very strong. Stocks are now being carried in the storehouse just completed.

◀ PHILADELPHIA ▶

The regular monthly meeting of the Lumbermen's Exchange was held Jan. 9, President William T. Betts in the chair. A letter from the South Philadelphia Business Men's Association was received at this meeting, asking the exchange to co-operate with it in a resolution urging anew on Congress the claim and advantage of the Philadelphia navy yard for location of a great modern dry dock. The exchange in resolution heartily endorsed the action of the South Philadelphia Business Men's Association. A letter was received by the exchange from the Hon. Bols Penrose, senator of Pennsylvania, asking the exchange to endorse a bill presented by Mr. Penrose in the Senate, for reducing the postage on first-class matter to one cent. The exchange complied in resolution. Some of the members of the wholesale, retail and sash and door trade gave short talks at this meeting on the advantages of association work.

William P. Shearer of Samuel H. Shearer & Son says last year's trading was excellent and so far no abatement. His firm has sold out its yard at Marion, N. C., and opened an office in Fayetteville, N. C., which is in charge of J. H. Langham, who formerly served in another department of the firm. It has secured M. D. Chamberlin, salesman, to cover Philadelphia and southern New Jersey, and V. Paul Hallowell to look after New York state.

Arthur W. Kent, secretary and treasurer of the J. S. Kent Company, says no fault is to be found with last year's sales. But for shipments and collections which are somewhat slow, everything at present is moving smoothly.

H. Billetter, manager of the Co-operative Insurance Company which makes a specialty in fire insurance for lumbermen, says the year's business was satisfactory and the outlook in the lumber field is promising.

George Wright, formerly with the Monarch Lumber Company, has again

and himself with John W. Coles, with whom he gained his first practical business experience. Mr. Wright, who is one of the best-known young salesmen in the East, will look after the selling and buying. Mr. Coles says he has every reason to be satisfied with the business of 1912, and sees potent signs of a robust trading for the new year.

W. S. W. Kirby of the Kirby & Hawkins Company states that a satisfactory year's business has been closed. The company has every reason to believe in an accelerated activity for the coming year. Railroads are buying freely and there is a healthy demand throughout the trade.

Howard B. France, secretary and treasurer of the Monarch Lumber Company and of the Haddock-France Lumber Company, reports a sustained activity and anticipates a swelling prosperity for 1913. The mill is rushed to the limit and many orders are now sent there direct.

Ralph Souder of Hallowell & Souder says orders are being booked right along, but to get the goods he fears will be a problem hard to meet by many lumbermen this year. The outlook for business is encouraging.

Herbert E. Sumner of the Sumner Lumber Company, New York City, was a recent visitor to the local trade.

The W. R. Taylor Lumber Company has removed its office to 1829 Land Title building, where with larger quarters it will have better facilities to handle the increasing business.

← PITTSBURGH →

W. W. Vosburgh of the old firm of Bemis & Vosburgh is now located at 1011 Bessemer building, where he will handle the hardwood stocks of the Bemis Lumber Company from its mills at Bemis, W. Va., and Petersburg, Va. The office of Bemis & Vosburgh in the Farmers' National Bank building was closed Jan. 1.

The Duquesne Lumber Company reports a fine eastern business. Since its big mill at Braemar, Tenn., has been operating, the company has been able to keep almost abreast of its shipments. Sales Manager G. C. Adams is working the eastern trade this week.

The B. W. Cross Lumber Company, which has taken over the business of the Thomas E. Coale Lumber Company in the Pittsburgh district, is located in fine quarters in the Oliver building. It has been incorporated with a capital of \$5,000 by the following members: B. W. Cross, Pittsburgh; R. H. Moore, Fred H. Ely, T. F. Dalrymple, Philadelphia; L. R. Harvey, Wilmington, Del.

The Foster Lumber Company is a new hardwood concern at 814 Bessemer building. For many years it has been operating country mills in western Pennsylvania and West Virginia and established the Pittsburgh office in order to make a clearing house for this business. The company has 1,500,000 feet of standing white oak within street car distance of Pittsburgh and recently bought 300 acres more of good hardwood timber in West Virginia.

J. J. Linehan is making good headway in selling the poplar and oak stocks of Mowbray & Robinson, whose mills are located in Breathitt county, Kentucky. He regards the outlook for business much better than last year.

I. F. Balsley of the Balsley & McCracken Company was in Buffalo and other eastern points last week and found hardwood buyers pretty well disposed toward heavy purchases. He has been getting some splendid orders for chestnut the past few weeks.

The J. C. Donges Lumber Company has a larger force of salesmen than last year as it has added C. E. Bald, recently of the Coale company force. Mr. Donges stands A 1 with the yard trade in western Pennsylvania and his hardwood business is growing rapidly.

A. G. Breitwieser of C. E. Breitwieser & Co. spent the last two weeks in Ohio with the retail yard people. He finds them well fixed in general, in that they have low stocks and are feeling much better over the general situation than for a long time.

The Adelman Lumber Company has recently made some splendid connections which will give it very fine stocks of good poplar to offer this year. Mr. Adelman, president of the company, has been in the South the past two weeks looking after the mill end of the business.

H. T. Lincoln, formerly of Bemis & Vosburgh, is now general manager of the Gibson Lumber Company of Masontown, W. Va. His partner is James C. Gibson of Masontown. The company has 25,000,000 feet of hardwood and hemlock and Mr. Lincoln is pushing its business up to a very profitable notch.

← BALTIMORE →

The Baltimore delegation going to the annual meeting of the National Lumber Exporters' Association, held at Chattanooga, Tenn., on Jan. 23 and 24, left here Jan. 21. Secretary Price will present his report on various matters that have claimed his attention during the year, one of them being the question of through bills of lading and the complaint filed on the subject with the Interstate Commerce Commission at Washington. This complaint, as stated at the time, was directed against practically all of the railroads east of the Mississippi river and asked the commission to require the transportation lines to abrogate the regulations which serve in effect to stop the exportation of lumber. No time for a hearing has yet been set.

A movement is on foot to form an association of traffic men in Baltimore, with the object of bringing about a closer relationship between those engaged in the transportation business and allied interests. The move-

ment is being encouraged by A. E. Beck, traffic manager of the Merchants' and Manufacturers' Association, and E. A. Walton, district passenger agent of the Baltimore & Ohio Railroad, has also been talking up the matter. A meeting in furtherance of the object is to be held shortly.

The Mann & Parker Lumber Company, dealer in oak, ash, chestnut, cypress and other woods, was incorporated at Dover, Del., on Jan. 16 with a capital stock of \$25,000. The incorporators are Frank A. Parker, Stephen S. Mann and Morris A. Soper. The charter gives the company the right to acquire timberlands and to manufacture lumber of all kinds, but it is not likely that this provision will be exercised. Messrs. Mann and Parker, who were members of the wholesale firm of Mann & Parker, which went into bankruptcy some months ago, blaming a mill enterprise for most of their troubles. The company has offices on the sixteenth floor of the Equitable building. The assets of the firm are still in the hands of a trustee for distribution.

George French Strother, a well-known lumberman of West Virginia, died at his home in Welch, that state, on Jan. 5 of malignant tonsillitis. He was only about thirty-nine years old and his demise proved a great shock to his many friends. Mr. Strother made his headquarters at Welch and was president of the Forest City Lumber Company and of the Dry Fork Planing Mill Company at War, W. Va., on the Norfolk & Western Railroad. He never married. The funeral took place the following Tuesday at Culpepper, Va., where Mr. Strother was born.

← BOSTON →

Secretary Ernest N. Bagg of the Massachusetts Retail Lumber Dealers' Association is quoted as saying that an appeal will be taken from the recent decision of the United States District Court of New York, which granted a permanent injunction against the Eastern States Retail Lumber Dealers' Association. He stated that the case would be carried to the Supreme court of the United States. Secretary Baggs states that the Massachusetts Retail Lumber Dealers' Association is purely a social organization and that its principal function is the holding of an annual banquet.

The Midland Chair & Seating Company, Portland, Me., has been organized with a capital stock of \$400,000. The incorporators are Albert F. Jones, Albert A. Richards, B. M. Maxwell and A. F. Farnham.

John M. Woods of John M. Woods & Co., Cambridge, Mass., is making an extended trip through the West and South. He was a guest of the meeting of the Indiana Hardwood Lumbermen's Association.

← COLUMBUS →

Steps are being taken by Governor Cox of Ohio as well as members of the Ohio General Assembly for a complete reorganization of the Ohio Public Utilities Commission which has charge of all shipping matters in the Buckeye state. It is proposed to give the shipper of the state better service by establishing a bureau to look after shippers' complaints exclusively. Lumbermen and building supply men are favorable to the plan of reorganization.

The board of directors of the Columbus Builders' and Traders' Exchange in its annual report showed that plans for buildings valued at \$8,000,000 passed through the exchange during the year 1912. Contracts aggregating \$2,000,000 for outside work were awarded members of the organization. John A. Kelly has been re-elected secretary, and E. L. Harris, treasurer.

Papers have been filed increasing the capital stock of the Conneaut Lumber Company of Conneaut, O., from \$10,000 to \$25,000.

R. W. Horton, manager of sales for the central division for the W. M. Ritter Lumber Company, says trade is firm in every variety of hardwoods. Stocks are extremely light and as a result prices are firm. Both manufacturing establishments and retailers are buying well, but the latter are now the best customers. Furniture men are attending the semi-annual shows, which is making that branch of the trade quiet. All grades are moving well.

J. A. Ford of the Imperial Lumber Company reports a good demand for all hardwoods, with prices well maintained. Shipments are as good as could be expected under the circumstances.

J. C. West, president of the Midland Lumber Company of Parkersburg, W. Va., was a business visitor in Columbus last week.

Secretary Benbow of the Sowers-Leach Lumber Company says trade is good in every direction and prices are firm. The principal drawback to a more active market is the weather, which interfered with the movement of salesmen.

John R. Gobey of the concern bearing his name reports a very fine demand for all hardwoods, with prices strong. There has been a good volume of business with stocks light in most sections. The car situation has improved materially.

F. Everson Powell of the Powell Lumber Company says the volume of trade is good, with prices firm and inclined to strengthen. Stocks are extremely light.

Manager Hodil of the Virginia Lumber Company says trade conditions are satisfactory in every respect, with all grades moving well. Prices are holding up firmly and inclined to advance.

The Hoskins Lumber Company of Mt. Gilead, O., has been incorporated with a capital stock of \$10,000 to handle lumber. The incorporators are John C. Hoskins, M. M. Hoskins, Morris W. Kline, Ethel Elder and J. W. Barry.

The Clearview Manufacturing Company of Webster, O., has been incorporated with a capital stock of \$10,000 to manufacture window sashes and like articles. The incorporators are A. C. Beymer, W. A. Henney, J. S. R. Overholt, John D. Overholt and M. O. Overholt.

H. B. Nelson has taken over the business of the C. T. Nelson Lumber Company, which operated a plant on Dublin avenue. The concern had been operated by B. W. Gerhard as receiver for some time. The new name of the concern is the Nelson Lumber and Manufacturing Company.

◀ CINCINNATI ▶

Both band mills of the Kentucky Lumber Company at Burnside and Williamsburg, Ky., are running full time. President DeLaney just returned from the mill and states that the output will be increased as much as possible. Plenty of fine timber is being received from the La Follett timber recently purchased and, while there is very little accumulation at either mill, the company will be in as good a position to supply the heavy demand of the early spring as any other dealer in this section. The outlook is very promising.

Fred Mowbray of Mowbray & Robinson states that their three mills at Quicksand and Irvine, Ky., are being pushed to the limit and that the supply of logs on hand is fine. Mr. Mowbray states that his firm booked ahead a very heavy business and prices obtained are very satisfactory. He looks for a continuation of the present demand practically all of this year.

Ben. Dulweber of the John Dulweber Company is away on a business trip. Chas. Dulweber stated today that he has never seen business so heavy at this time of the year nor prospects so bright. He stated that until recently it was a difficult matter to keep up with the demand, but since the car shortage has eased up a fine lot of new stock is being received.

The Johns-Mowbray-Nelson Company, one of the newest combinations of hustling young lumbermen, is doing a splendid business and is enjoying the success that it deserves. The company is handling the output of several band mills. Mr. Johns reports business as exceptional at this time of the year, with prospects the brightest for a continuation.

Edward Barber of the Howard & Barber Lumber Company states that the export trade is as good as he has seen it for some time and that the domestic business also has been excellent all last year, especially during the latter part. He can see no reason for any interruption either here or abroad and expects to find general conditions improve.

Work on the new Hotel Gibson will soon start upon the site of the old building recently destroyed by fire. Workmen have almost completed clearing away the debris and the Wells Brothers Construction Company of Chicago, which has the contract for the new building, has a large quantity of material on the ground ready to start just as soon as possible.

◀ TOLEDO ▶

President Booth of the Booth Column Company, states that his concern is busier at present than ever before at this season of the year in the history of the plant. The factory is operating with its full quota of men nine hours a day and has orders on hand which will keep them busy for the next two months. The demand is extremely heavy for this season of the year and the stock of columns on hand is much less than is usually carried. The concern has plenty of lumber on hand, but complains somewhat of high prices, oak and yellow pine being the materials mostly used by the plant.

The Big Four Hardwood Company has taken on a new line of industry in the last six months, and is now manufacturing piano cases. The cases made are simply plain stock cases for the piano case factories, where they are veneered and polished. Manager Roberts of the Big Four company says that the new venture has proven more than successful and a big business is being worked up.

John J. Reinhart, treasurer and general manager of the Toledo Bending Company, has returned home after spending several months in Michigan for his health. He is much improved, but not yet able to resume his duties at the office. During his absence his place has been filled by his brother, W. H. Reinhart. Mr. Reinhart reports business good and orders plentiful. Hickory and ash stocks are badly needed and hard to get owing to the scarcity brought about by the soft weather which has prevailed throughout the winter.

The Gottshall Manufacturing Company, which was partially burned out several months ago, is planning to begin the rebuilding of its plant in February.

The Boys' Manufacturing Company is the name of a new manufacturing plant to be opened up at Dayton, O., in the Y. M. C. A. building. It will manufacture box furniture of all kinds. J. Wallace Jerram and J. I. Lambert are among the directors and Platt B. Lawton and C. B. Kern of the Y. M. C. A. are assisting the boys with their plans.

The G. J. Brethauer Planing Mill Company of Dayton, O., will furnish material for the big addition to the N. C. R. Hall of Industrial Education to be erected at Dayton.

A new Toledo corporation has been organized in this city under the firm name of the American Floor Surfacing Company. C. G. Cunningham, L. T. Williams and R. T. Garrison are the incorporators.

The Dayton Wholesale and Retail Lumber Dealers' Association gave a dinner at the Beckel Hotel at Dayton recently. Arrangements were made for sending a delegation to the state convention at Cleveland next week.

The Toledo Board of Mechanics and Law will meet on Monday and again intend to recommend the enactment of the lien law drafted by Attorney Conley of Toledo, which is patterned after the Michigan law.

Mrs. Elizabeth Lindow, wife of William Lindow of the firm of Lindow, Liebins & Gerehow, furniture manufacturers of Toledo, died Saturday morning at her Palmwood avenue home after an illness of six weeks. She was fifty-eight years old, and leaves a husband and three sons, Edward and Fred W. of Toledo, and William E. of Buffalo, N. Y.

The McCrillis Handle Company, which has been located at Nelle, Coshocton county, will be removed to Norwalk, O., where a new cement, fire-proof building with basement has been erected for it. The company still has about a month's work at Nelle, after which the plant will be dismantled and brought to Norwalk. According to the annual report 1912 was the best year the concern has known. Prospects for the coming season are excellent.

◀ INDIANAPOLIS ▶

During the three months ending December 31, rosewood, mahogany and walnut logs valued at \$16,773 passed through the local customs house.

With an authorized capitalization of \$35,000 the Modern Cabinet Company has been organized here and incorporated and will establish a plant for the manufacture of kitchen cabinets. Officers have been elected as follows: President, Charles C. Becker; vice-president, Louis G. Bauer; secretary, Alfred A. Becker; treasurer, George V. Bedell, and attorney, Monte C. Fiscus.

Mrs. Mary K. Russell, wife of Isaac Russell, president of the Capitol Veneer Company, died at the family home, 1660 Ashland avenue, on Jan. 16, after a short illness. Burial was in Crown Hill cemetery. Besides the husband, one son, Ralph Russell, survives.

The Quartered Oak Veneer Manufacturers' Association held a meeting at the Denison Hotel on the evening of Jan. 15. There was a good attendance and a discussion of business conditions followed an informal dinner. Reports received were that while the production had not been decreased since July 30, the supply of dressed quartered oak veneer in warehouses had decreased 1,250,000 feet since that date. Prices were reported firm with an upward tendency and the demand exceptionally good, buyers being plentiful and buying freely.

◀ MEMPHIS ▶

The Mississippi river at Memphis promises to reach a stage of thirty-eight feet. This will cause some inconvenience to a few of the plants on Wolf river in North Memphis. It is not expected, however, that more than one or two will have to close down. Furthermore, it is not anticipated that the interruption to operations will continue for any great length of time. The stage of the river here on Jan. 20 was approximately thirty-five feet. All land lying outside the levees is overflowed. Land protected by the levees, however, is in very satisfactory shape and it is not anticipated that there will be any of this overflowed. Practically all of the breaks in the levee system have been sufficiently repaired to prevent any damage from the present indicated stage.

The heavy rains which have occurred in this section during the past few days have an important bearing upon the timber supply for the late spring. It is a matter of knowledge that a great deal of timber has been prepared for shipping and is therefore available for early use. It is a question as to the extent to which the low lands of this territory are flooded. It has rained every day or two since the first of the new year and the ground is already getting so wet, particularly in low places, that it is almost impossible to do any work in the woods. Last year there was serious curtailment in operations as a result of floods in the Mississippi and the breaks in the levee system resulting therefrom. It is not expected that conditions this year will be as bad in respect to floods, but the continued rains are calculated to interfere with work in the woods and therefore to restrict the amount of timber that is available. Hauling with wagons is almost out of the question already and it is necessary to use other means of getting timber to river banks and the rights of way of the railroads.

Application for a charter has been made by the I. M. Darnell Son Company. The capital stock is placed at \$100,000. In addition to I. M. Darnell and J. D. Allen, Jr., the incorporators are J. D. Cutsinger, E. T. Hazledine and J. L. McClellan. This is practically the personnel which was used by I. M. Darnell & Son Company before the consolidation was made between the latter and E. E. Taenzler & Co., Inc.

The Kimball Lumber Manufacturing Company, St. Louis, has purchased 2,340 acres of timberland from B. T. Gregg and others near the mouth of the White river in Arkansas. The consideration was about \$22,000.

Among the lumbermen who will accompany the Business Men's Club party on its tour of the South and its trip to Panama are the following: Frank May, May Brothers; S. B. Anderson, the Anderson Tully Company; J. T. Willingham, the Memphis Culin Company; and M. H. Brown of the Mark H. Brown Lumber Company. All of these gentlemen will be accompanied by their wives.

Mr. and Mrs. F. E. Gary, together with Mr. and Mrs. George Foster of Mellen, Wis., will leave Memphis Feb. 8 for a trip to Panama and other points of interest. This trip was planned some time before that of the Business Men's Club, to which reference has already been made.

The Robe-Lake Lumber Company has filed an amendment to its charter through which the name is to be changed to the Brown Brothers Land and Lumber Company. The Robe Lake Lumber Company was organized several years ago to take over a large tract of land in Arkansas and was controlled by a number of Memphis lumbermen. The incorporators who signed the foregoing amendment are W. B. J. G., and T. M. Brown. W. M. Wood and Leroy Oleott.

Walker L. Welford, vice-president and general manager of the Chicasaw Coopersage Company, says that the new plant now being erected at Birmingham will be in readiness for operation by the first of February. It will be used chiefly for the manufacture of heading and staves. The old plant at Sycamore and North Front streets will be used for finishing purposes. The former will employ about 200 men and the latter about 250.

J. W. Wheeler & Co., Madison, Ark., have recently made extensive additions to the plant at that point. It was necessary to close down for some time as a result of inability to bring out timber. During the intermission advantage was taken of the opportunity to make repairs and improvements. A resaw has been added and the capacity of the plant has been materially increased. Heretofore the company has cut about 40,000 feet per day. Its output under the new regime will be approximately 55,000 feet. The company is also negotiating for additional timberlands in that section. The recent rise in the St. Francis river has given it an ample log supply for the immediate future.

The plant of the Morgan-West Box Company, Madison, Ark., has been able to resume operations also as a result of the rise of the river at that point. For quite a while it was impossible for this firm to run its plant. It had plenty of timber near the river but the water stage was too low to enable it to bring this down.

◀ NASHVILLE ▶

Widespread damage was done in this city and throughout this entire section by the floods during the past ten days or two weeks. The Cumberland river was higher than it has been for the past sixteen years and as a result the lumber interests suffered materially. Many lumber yards in Nashville, located on the river banks, were submerged and in numerous cases the water rose to the engine rooms of the lumber plants, making temporary shutdowns necessary. All along the river banks, both above and below this city, quantities of logs, many of them ready for transportation in rafts, crossies and manufactured lumber were washed away and heavy losses thus sustained. Many rural mills were forced to suspend operations for a time also. In Nashville it is estimated that the losses totaled something like \$10,000 or \$12,000. The river is now again within its banks, however, and operations have been resumed.

The Nashville Lumbermen's Club has invited the Louisville, Ky., organization to visit this city the second Tuesday in February, which invitation has been accepted. The Kentuckians will reach Nashville early in the day and will be shown numerous attentions, including a banquet at the Commercial Club in the evening. They will be given a genuine good time.

An increase from \$9,000 to \$15,000 has been made in the capital stock of F. L. Estes & Co., manufacturers here of woodenware, etc. This increase was made necessary by reason of the growing business of the company. The company will install additional equipment.

Members of the local trade anticipate considerable benefits as a result of the completion of the Panama canal. The opening of this canal will mean more to the lumber trade of this section than to any other branch of export business. The southern trade at present is largely confined to eastern states and Europe, but the canal will make it possible to develop large Pacific coast interests as well as trade in South America.

◀ BRISTOL ▶

Dr. C. S. Aldrich of Johnson City, Tenn., was a visitor here this week. He is president of the Carolina Spruce Company, a large lumber corporation which is installing a big band mill near Pensacola, for the development of a large area of timber. The mill is on the Black Mountain railroad, which connects with the new Clinchfield. It will soon be put into operation.

O. H. Vail of Waynesville, N. C., head of the Waynesville Lumber Company, was a visitor in Bristol this week. His company has completed the erection of a band mill at Waynesville, for the manufacture of a large area of timberland twenty miles east of Waynesville. A line of railroad has been built and the company will turn out a large quantity of stock.

Fred K. Paxton of the Paxton Lumber Company, who has been located at Charleston, W. Va., in charge of the company's new operations in that section, is a visitor at the general offices in this city.

It was announced this week that the Norfolk & Western, Southern & Virginia and Southwestern, will, before Feb. 1, put into effect the reduced milling-in-transit charge at Bristol, in accordance with a recent order of the Interstate Commerce Commission in the case of the hardwood lumber interests of Bristol against the railroads. They will be compelled to make restitution of one half cent per hundred pounds on all milling-in-transit shipments since the rate was arbitrarily advanced from one to two cents. The new rate is one and one-half cents.

The Wilkinson-Matthews Lumber Company, which was organized in Bristol some months ago by E. H. Wilkinson, J. H. Matthews and others, last week filed a voluntary petition in bankruptcy. The assets are \$18,000 as against liabilities of \$21,000.

Among the buyers in Bristol this week was Frank B. Clayton, of the American Lumber and Manufacturing Company of Pittsburg, which is buying heavily on the Bristol market at present.

J. A. Stone of the Stone-Huling Lumber Company, has returned from a business trip to Norfolk and Washington.

The Levisa Land and Timber Company was organized last week at Grundy, Va., by E. R. Boyd and associates, with a capital stock of \$50,000.

◀ LOUISVILLE ▶

J. E. Barton, state forester of Kentucky, has taken occasion, in view of the floods along the Ohio, Kentucky and other streams in this state, to point out the possibility of preventing them by the placing of forests at their headwaters. He takes the ground that floods are largely due to the cutting out of forests at the sources of the streams, denuding the land and permitting the rainfall to run off immediately. This has the effect of causing flood conditions when with the forests present the stage of the rivers would not rise to a dangerous point. He urges that this question be taken up by Kentucky and neighboring states, and adds that his department is already entering into a study of the question.

The flood caused a considerable damage in Louisville, chiefly, however, through interruption of business. Among the concerns which were compelled to stop their operations for the time being were the Louisville Point Lumber Company, Louisville Veneer Mills, Booker-Cecil Company and the Booker Box Company. The yard of the Booker-Cecil Company was not actually flooded, but the tracks of its switches were covered, so that business could not be continued for several days. The Louisville Point Lumber Company succeeded in removing most of its lumber before the water got into its yard, so that its loss from flooded stock will be relatively small.

The Roberts-Conner Veneer Company, New Albany, Ind., across the river from Louisville, had to shut down on account of the flood. B. W. Lord of the Chicago Lumber and Veneer Company, Burnside, Ky., estimated the loss to the lumber and timber interests of the Cumberland valley at close to a million dollars. His own company was fortunate in saving most of its logs. The Kentucky Lumber Company, Burnside, suffered through the flooding of its yard. B. F. Rakestram of Burnside is reported to have lost lumber valued at \$25,000 from the flood. The Cumberland river situation is being used as a strong argument in favor of improving the river and creating a navigable stage for most of the year. Kentucky river mills suffered as well as those on the Cumberland river. Those at Frankfort were invaded, but as several were closed down anyway, the loss was comparatively small.

The Louisville Board of Trade has engaged Louis B. Wehle to prepare its complaint, which is to be filed with the Interstate Commerce Commission against the Louisville & Nashville Railroad Company for the purpose of compelling that road to accept switching from competitive points. The board believes that the present statutes afford ground for relief, but additional help will be given by Congressman A. O. Stanley, who has secured a favorable report on an amendment to the interstate commerce law which will force the railroads to accept switching business of the kind to which the Louisville & Nashville objects.

State Forester J. E. Barton hopes to be able to secure the use of government funds under the Weeks law for the establishment of a patrol system in the forests to prevent fires and waste. The state will put up an amount equal to the expenditure authorized by the federal government. Mr. Barton is compiling statistics showing the increase in timber values in this state. He is to be given the services of an assistant, the work of the department having developed rapidly since he took hold four or five months ago.

The fact that the production of lumber in Kentucky fell off in 1911 as compared with previous years is not taken to mean that the state is losing its grip as a manufacturing section. On the other hand, it is pointed out that numerous mills are being located in eastern Kentucky, which is now being opened up by new railways, and that during 1913 and 1914 the production of hardwood lumber in this state should be close to a billion feet. In 1911, according to figures of the Census Bureau, the manufacture of lumber amounted to 632,415,000 feet.

The Kentucky, Tennessee & Alabama Railroad is to build between Williamsburg, Ky., and Chattanooga, Tenn., paralleling the line of the Cincinnati, New Orleans and Texas Pacific for most of the way, it is reported. It is to take the place of the Appalachian Railroad Company, which was chartered last May.

R. S. Hill, formerly general manager of the Adler Organ Company of Louisville, has purchased the old factory building of the Chilton-Guthrie Trunk Company in Highland Park, south of Louisville, and is now equipping it for the manufacture of organs. It will have a capacity of 4,000 a year, he states. Mr. Hill will be in the market for lumber, including dimension stock, veneers and possibly glued-up stock, as soon as his factory is in running condition, which will be in about sixty days.

J. M. Rice of Dry Ridge, Ky., is preparing to establish a small band mill, and is in the market for used equipment of that character.

The W. F. Gokra Tie Company, Cleveland, O., is reported to be planning the establishment of a tie creosoting plant at Maysville, Ky.

Among the Louisville hardwood men who attended the annual of the Indiana Hardwood Lumbermen's Association in Indianapolis last week were T. M. Brown of the W. P. Brown & Sons Lumber Company; Edward

L. Davis of the Edward L. Davis Lumber Company, Roscoe T. Smith of the Ohio River Sawmill Company, and Stuart R. Cecil and P. G. Book, of the Booker-Cecil Company. All are members of the Louisville Hardwood Club.

ST. LOUIS

The meeting of the Lumbermen's Club set for Jan. 21 has been postponed until Feb. 4, owing to several lumber conventions taking place during the week of Jan. 21.

At a meeting of the board of directors of the Lumbermen's Exchange, held Jan. 9, W. W. Milne was re-elected treasurer and George McBlair secretary. At another meeting of this body, held on Jan. 21, several important matters were discussed. Among them were the re-adjustment of the insurance law, the inspection department and the traffic department. In the matter of insurance, the insurance committee was instructed to get better protection by formulating some scheme in the way of a new law. President Smith was instructed to select an inspector who was well posted in hardwoods as well as yellow pine. The traffic matters were placed in the hands of Chas. E. Thomas, who will look after that department personally. Under the new administration the financial condition of the exchange will be made much stronger than in the past. President Smith also announced the names of the various committees and his selection was ratified.

At a meeting of the executive committee of the Lumbermen's Club, held on Jan. 21, the matter of introducing a bill in the Legislature to create a Bureau of Forestry was recommended. A number of other matters were also discussed, the nature of which was not disclosed.

E. W. Blumer, sales manager of the Lothman Cypress Company, left last week for the Oshkosh, Wis., plant, where he will put in shape several kilns which were destroyed by fire recently. Following this he will go through the eastern territory on a selling trip.

W. W. Dings of the Garetson-Greason Lumber Company spent several days in Kansas City last week and of course he returned with a nice lot of orders. Mr. Garetson, who has been on the Pacific coast for several weeks, has returned home. Mr. Dings reports that the company is sold up on oak, that all its mills are running and that prices are more than satisfactory.

MILWAUKEE

The will of the late Edward Bradley, a well-known Milwaukee lumberman, has been admitted to probate. The will disposed of an estate valued at \$3,600,000, composed of real estate valued at \$600,000, and personal property valued at \$3,000,000. Each of his three daughters receive one-third of the estate.

The plant of the Kaukauna Lumber and Manufacturing Company was destroyed by fire on Jan. 12, causing a total loss of the sawmill and dry-kiln, valued at \$25,000, with insurance of \$10,000. The cause of the fire is unknown.

The Marinette & Menominee Box Company, of which John A. Cook of Marinette is president, will engage in the manufacture of lumber for its own use in manufacturing boxes. Heretofore the company purchased all its lumber from mills.

The State Conservation Commission will recommend a one-tenth mill tax for twenty years, the funds to be used for upbuilding the forest reserve. The tax would raise \$284,000 a year and would permit the purchase of timber tracts in northern Wisconsin. State Forester E. M. Groffith believes that the state must own more than the present 400,000 acres. The tax on growing timber should be lowered, he said, and the harvest tax raised to conserve the forests.

The W. E. Priestly Lumber Company has been incorporated by W. E. Priestly, G. W. Priestly and E. Von Briesen at Milwaukee with a capital stock of \$20,000.

M. H. Hand of Plymouth, proprietor of a successful lumber business, has taken members of his family into the business and incorporated as the M. H. Hand Lumber Company. He will be president of the firm, which has a capital stock of \$40,000.

J. D. Mylrea, C. L. Hale and W. H. Mylrea have incorporated the Hale-Mylrea Lumber Company at Wausau with a capital stock of \$12,000.

The sawmill of the Bayfield Box and Lumber Company has commenced operations, and an immense business in handling hardwood is expected. New life has been put into the plant and a big run of business is planned.

At the annual meeting of the Hardwood Products Company of Neenah the election of officers resulted as follows: W. C. Wing, president; D. L. Kimberly, vice-president; C. B. Clark, secretary; E. D. Belas, treasurer.

T. T. Jones, formerly with the G. W. Jones Lumber Company of Appleton, has assumed the position of manager of the hardwood department of the Webster-Whipple Lumber Company at Minneapolis, Minn.

Provided that sleighing continues for several weeks more, the logging operations this year in northern Wisconsin will be one of the largest in its history. That the 1913 cut will exceed any previous total by fifty per cent is predicted by prominent lumbermen in that section. The good demand has brought out nearly every operator.

Mrs. Florence J. Peck of Fond du Lac and Mrs. Benjamin Hopper of Oshkosh have acquired the interest of C. J. Medberry in the Gurney Refrigerator Company. Mr. Medberry was president and general manager since organization, and the sale places the control of the plant, employing

more than 200 persons, in the hands of the two women. The company has a capital of \$150,000. All of the stock was owned by C. J. Medberry, who died recently. David J. K., one of the original founders, died recently.

CADILLAC

Henry Ballou, general manager of Cobbs & Mitchell, Inc., wife and daughter, sailed Jan. 23 for a thirty days' cruise to the West Indies and will touch at Colon. Mr. Ballou expects to arrive home early in March.

W. W. Mitchell, president of Cobbs & Mitchell, Inc., and The Mitchell Brothers Company, wife and daughter have left for a tour in the South, centering around Augusta, Ga. Mr. Mitchell shipped his large touring car and will motor through a portion of the South. He expects to be away from four to six weeks.

F. J. Cobbs of Cobbs & Mitchell, Inc., wife and son will locate at Los Angeles, Cal., for the winter.

Unless there is more snow in Michigan, outside of what is known as the "snow belt," parties expecting to put in logs, wood and other commodities will be minus a sleigh haul. Even in Cadillac the sudden change in the weather has broken the sleighing and as a consequence 300 teams are idle. This will mean a large decrease in the input of logs, unless more snow falls. It is a fact that at Petoskey and Harbor Springs the ground is as bare as in the summer time, and Little Traverse Bay, which is usually frozen with ice at this time of the year, has not yet been frozen.

The Oval Wood Dish Company of Traverse City has enlarged its clothes pins department, employing forty additional men. It will turn out one carload of the finished product, amounting to 1,500 boxes of five gross, a day. This company now employs 500 hands and the factory runs continuously during the year. It will use not less than 15,000,000 feet of lumber and produce 1,200 carloads of an average of four cars per day in all of its products, wood dishes, clothes pins, etc.

The Hardwood Market

CHICAGO

Steady increase in demand on the part of all consuming factors in Chicago have marked the last two weeks in the hardwood business of this city. The inventory season is practically over, and with few exceptions the local factories are in the market strongly. There continues to be every reason to anticipate strong business during the next year. As in other sections of the country, the furniture trade in Chicago is strong and manufacturers are predicting even greater demands for their product, which naturally will result in increased demand on their part for hardwood lumber of various kinds. As in the furniture trade, so in the other lines including the implement manufacturers, millwork houses, door concerns, car shops,—all are showing a decided disposition to get hold of sufficient supplies of dry hardwood lumber at any reasonable figure. They evidently have come fully to realize the absolute necessity for buying now wherever they can do so on any reasonable basis.

There is no boom—present conditions are the result of a natural healthful improvement in all business, which has been reflected particularly on the lumber business.

Local lumbermen have experienced some added difficulty in making deliveries on account of flood conditions in the South. No one is predicting any accumulation of hardwood stocks during the next six months, and all are predicting at least a maintenance of present hardwood values and a probability of a gradual increase in most lines of staple stock.

NEW YORK

The local hardwood market continues firm in the matter of price, though there is noted some decrease in volume, but this is only seasonable and the demand will doubtless pick up after inventories are completed. Stocks are reported low at mill points as approaching the spring season which shows every likelihood of being active. Stocks on hand in most cases are badly broken. Birch and maple continue strong in demand and firm in price, while plain and quartered oak are in good call; ash is also in good demand at good prices. It is expected that the yard and factory trade will shortly be in the market for large supplies.

BUFFALO

Trade in hardwoods is quite satisfactory and has shown a good deal of improvement as the month progressed. Scarcity of the better grades of a number of hardwoods has turned inquiry to the lower grades, which are also in small supply. The demand has been well distributed over the list and the prices of all varieties have been holding firm. Dealers are looking for business to make a good showing for some time ahead, and for prices to hold very strong in most woods.

Plain oak, both red and white, has as usual led in demand, it being immaterial to many buyers which is supplied. Quartered oak in first

and seconds is moving pretty well, although the common is not active. Brown ash is one of the other woods in better than average demand. Maple shows a tendency to advance and is being held at unusually strong figures at the producing points. Chestnut is stated to be in normal demand, while poplar remains a rather slow mover, though direct shipments are being made West.

◀ PHILADELPHIA ▶

Although somewhat of a hiatus is always expected during the opening weeks of the new year, owing to the natural distractions of the holiday season and the balancing of accounts for the past year, the hardwood market has maintained a reasonable activity during the last fortnight; many inquiries have been made and a considerable amount of business booked. Evidently the business man is anticipating a prosperous year, consequently is making every effort to secure himself with sufficient stock ahead. Although reports from the mill end indicate better conditions as to logging, etc., the orders already placed will no doubt prevent any accumulation of stock for months to come.

The wholesale consumers continue fairly active, and an optimistic feeling as to outlook is expressed on all sides. There is no indication of a

diminution in activity among box makers, and building operations for 1913 are in for a large volume of business for interior finish work. Conservative houses concede that everything looks satisfactory for the coming year, but the momentous question, "Can you deliver the goods?" is already being heard in many places among the anxious buyers.

There is no sign of wavering perceptible anywhere in hardwood prices, and any probable change will more likely strengthen than weaken values. Oak continues king of woods, with quartered oak climbing; ash shows improvement; basswood, maple, birch and beech are in good demand; poplar holds steady; mahogany is much called for in the furniture trade.

◀ PITTSBURGH ▶

Some easing off in buying is noted in the hardwood market since the first of the year, particularly in the East. This is reported to be due to the fear of unwise tariff agitation. In general, however, the tendency is toward strong buying even for delivery six and eight months ahead. Prices are good and there is no doubt but that business is coming in in a much larger volume than last year. Yard buying is not satisfactory. Retailers have been unusually careful this winter in taking stocks and are looking ahead with a wise eye to forecast the building situation more carefully before they order heavily.

◀ BOSTON ▶

The feature of the hardwood market in Boston is the strength with which prices are held rather than activity to demand. Practically all of the reports from mill sections of the country indicate renewed strength upon the part of manufacturers. The stocks of hardwood lumber at mill points are not large and manufacturers insist upon asking prices, feeling they are justified in doing so. There may be a few lots offered from time to time that would indicate that the holders were not quite as firm as reports show, but when the whole story is told, it is generally found that the offerings are not up to standard or that some manufacturer is in need of cash and is willing to make a concession in order to get the ready money to meet some pressing obligation.

The general demand for hardwood lumber in this market is fair. Consuming manufacturers are doing a good business and in but few cases are their stocks of lumber large. For several weeks reports have tended toward a further advance in plain oak, and during the past two weeks some dealers have actually asked a higher figure. This is especially true of stock coming from Indiana and Ohio. Quartered oak has also been firmer with a better demand. Low-grade poplar continues to sell well, but the top grades are not active. Ash has attracted a fair amount of business, and the demand for elm has ruled moderate. Cypress is in fair call.

◀ COLUMBUS ▶

The hardwood trade in Columbus during the past fortnight has been active in every direction. The demand for all varieties and grades has been good and prices have been well maintained. Stocks in every locality are rather light and no accumulations are reported in any section in this territory.

One of the worst features of the trade has been the high waters which shut off traffic on a number of railroad lines from the hardwood fields. This is especially true of the C. & O. and the K. & M., which cross the Ohio river into Ohio from the West Virginia fields. The bridge on the C. & O. was destroyed and traffic on the K. & M. was suspended for almost a week. The net result of this state of affairs was a dearth of stocks in many places. The car shortage is still bad, although not so many complaints have been heard recently.

Manufacturing establishments are still the best buyers of hardwoods, although the yard trade is in the market for larger stocks. Retailers' stocks are light and there is every indication of active building operations. Factories engaged in making furniture, implements and vehicles are buying larger stocks.

Quartered oak is in good demand in every section and prices are firm. There is a good demand for plain oak, both red and white, at firm prices. Chestnut is one of the strongest points in the market, with sound wormy especially in demand. Poplar is more active and stocks of the lower grades have decreased. Ash is selling well and the same is true of basswood. Other hardwoods are unchanged.

◀ BALTIMORE ▶

The hardwood business has been somewhat quiet so far this year; at least some members of the trade have found it so, while others state that they are getting a considerable number of orders and have nothing whatever to complain of. However, even those who report quiet admit that they have no unsold stocks of dry lumber on hand, and that they find it exceedingly difficult to obtain supplies which they could readily place. Apparently lumber is not any more plentiful than it has been in months, with the demand sufficient to take up promptly the output of the mills. The exceptionally mild weather in the East facilitates operation of mills and the production is likely to run ahead of most other years, though the absence of snow is something of a drawback, logging being made more difficult. Apparently there is a place for all the lumber that can be turned out and the accumulation of a surplus is not looked for.

FREIGHT OVERCHARGES

WE SPECIALIZE ON LUMBER TRAFFIC

We represent nearly every member of The Mississippi Pine Association

Our overcharge claims for one company, \$6,000.00

Let us analyze your freight accounts

Collect past and prevent future overcharges

Best references from Lumbermen from Canada to Mexico

COST BASED ON RESULTS

Write for particulars and terms.

The American Freight Audit & Storage Co.

Incorporated

Rooms 55-8, 39 West Adams St.

Chicago

WANTED

All Kinds of High-Grade

HARDWOODS

S. E. SLAYMAKER & CO.

Representing
WEST VIRGINIA SPRUCE LUMBER CO., Fifth Avenue Building,
Cass, West Virginia. NEW YORK

Bluestone Land & Lumber Company

MANUFACTURERS

WEST VIRGINIA HARDWOODS

Soft White Pine, Oak, Poplar, Chestnut, Hemlock

Band Sawed Stock

RIDGWAY

COMPLETE PLANING
MILL FACILITIES

PENNSYLVANIA

THREE STATES LUMBER COMPANY

Manufacturers of

SOUTHERN HARDWOODS

Cottonwood and Red Gum Specialties

MAIN OFFICE, MEMPHIS, TENNESSEE

It is also to be said that the price of pine has gone up rather than reacted, with the prospects decidedly favorable for another advance. Not a single item on the list shows weakness, with the exception, of course, of extra wide poplar, which has had no recovery whatever. Oak is very strong in practically all divisions, the domestic demand as well as the foreign inquiry being active. All the reports from the other side of the Atlantic are to the effect that stocks abroad are much lower than is usually the case and that the buyers manifest a disposition to meet the prices of the shippers, which evidence no signs of an easing off, though a change may come, if reports about the disruption of the Atlantic steamship pool, recently published, have a substantial foundation. Should the agreement between the various lines go to pieces on account of the action of some of them in establishing lines to new points in competition with the routes already in operation, ocean freight rates may take a decided drop, which would necessitate another readjustment. For the present, however, the rates hold firmly and export prices must be based upon them. As a rule the foreign stock lists show the various woods to be in far smaller supply at different ports than they have been in times past, and new shipments are being encouraged so as to bring the selection up to the required proportions. In the domestic market it is a case of buyers finding lumber at fair prices in sufficient quantities to meet their wants, which is by no means easy. The market is mainly a manufacturers' market, and the millmen are making attractive profits.

◀ CINCINNATI ▶

Bad weather has had the effect of checking up activities at the hardwood yards. Dealers are getting as much stock together as possible in anticipation of a very heavy early spring business. Stocks are arriving much more freely than for many weeks and, with the demand a little slack during the stock taking period, dealers hope to get a little ahead. All dealers express full confidence in the future market conditions and that prices will advance as the season advances. At producing points manufacturers will accept no business except at top prices, and few of them have much stock, despite redoubled efforts on their part to increase production. Buyers in the South are very plentiful and millmen need not reach out far to secure business. Factories are all running and are well supplied with orders for many weeks to come. None of these plants has much stock and are sending out numerous inquiries for supplies.

About the only change noted in the poplar market condition during the past week is the much better demand for the upper grades, which have not been doing well lately. This change for the better is not only encouraging to dealers, but bears out manufacturers who have been holding this class of stock at stiff prices. The demand for No. 2 and 3 common continues, the feature being the scarcity of these grades.

All grades of plain oak are in demand, as is chestnut. Quartered oak is strong in demand and price. Ash sells well and thick stock is much in demand and scarce. Poplar, basswood, cottonwood and gum in low grades are very scarce and bringing good prices. The upper grades of gum are becoming stronger all the time and firsts and seconds red gum is expected to advance quite a little in price on account of the demand for this stock, which is growing quite scarce.

After having to put up with the inconvenience of a steady rain for three days, the weather has settled down to fine, crisp but sunny days that will put new life into the lumbermen who have yards and are badly affected by such conditions. The receipts are very encouraging and as demand has slackened up a bit lumbermen are fast getting into a good position to take care of the expected heavy early spring business. All branches of the industry are in a very healthy condition, and the most optimistic expressions from the best posted lumbermen as to the prospects for good business are the best evidence of their confidence in business conditions. The activity of the factory trade all over this section is remarkable for this time of the year, and they are all well supplied with orders that will insure their running right along for many weeks.

The box manufacturers have been very busy and are calling for almost any kind of low-grade hardwoods suitable for making boxes. Most of these concerns usually carry large stocks in their own yards, but the consumption has been so great during the past several months that they are about cleaned out of stock and are taking all stock offered at reasonable prices.

◀ TOLEDO ▶

Conditions here have not changed greatly but stocks are badly broken. This condition also prevails at the mills, many of the southern mills being oversold for at least four months. There is very little if any speculative buying but buyers are taking about all the lumber they can readily secure for present use. The supply, however, in many lines is short. Plain red oak is leading the demand here. Good dry stocks are extremely scarce and the law of supply and demand regulates the prices. The better grades of hickory are in good demand just now and extremely hard to get. There is plenty of hickory to be had but the weather this winter has been extremely unfavorable for getting out logs, which accounts for the scarcity. Prices are of course consequently high. White ash is among the called for woods, much of it being used by automobile factories. Basswood is light as elm is being substituted quite freely for this material. The call for elm is strong with fair supply. The call for red gum is strong in both high and low-grade lumber, the heavier call being for the low-grade stock, which is largely used by boxing and crating concerns.

CINCINNATI

Hardwood Manufacturers and Jobbers

Richey, Halsted & Quick
HIGH GRADE SOUTHERN LUMBER

E. C. BRADLEY LUMBER CO.
HIGH GRADE WEST VIRGINIA HARDWOODS
GOERKE BUILDING

Johns, Mowbray, Nelson Company
OAK, ASH, POPLAR & CHESTNUT
GUM AND COTTONWOOD

C. CRANE & CO.
MANUFACTURERS HARDWOOD LUMBER
1739 EASTERN AVENUE

CONASAUGA LUMBER CO.
MANUFACTURERS HARDWOOD AND PINE
FOURTH NATIONAL BANK BUILDING

RIEMEIER LUMBER CO.
OAK, POPLAR, CHESTNUT
SUMMERS AND GEST STREETS

JAMES KENNEDY & CO., Ltd.
OAK, POPLAR AND OTHER HARDWOODS
FIRST NATIONAL BANK BUILDING

The Kosse, Shoe & Schleyer Co.
WALNUT, OAK, AND OTHER HARDWOODS
103-4-5 CAREW BUILDING

OHIO VENEER COMPANY
Manufacturers & Importers FOREIGN VENEERS
2624-34 COLERAIN AVENUE

CHARLES F. SHIELS & CO.
SPECIALISTS IN WIDE STOCK
POPLAR, OAK, CHERRY, BIRCH

GEORGE LITTLEFORD
RED CEDAR, CHERRY
OFFICE: 1263 RICHMOND STREET

SWANN-DAY LUMBER CO.
Mfrs. YELLOW POPLAR and WHITE OAK
SALES OFFICE—SECOND NATIONAL BANK BUILDING

KILN DRIED OAK
AND OTHER HARDWOODS

are one of our many "specialties" which are so satisfactory to others. Why not you?

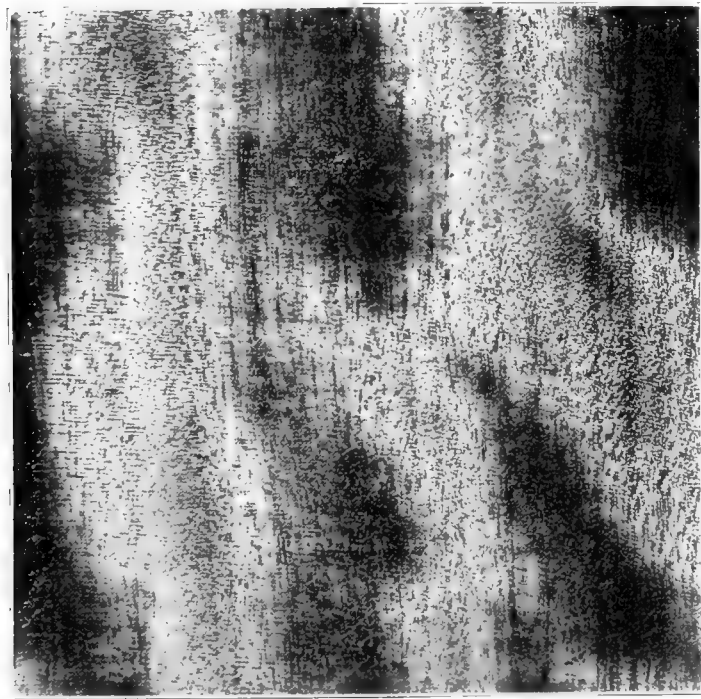
Might pay you to get in touch with us. It has others

THE M. B. FARRIN LUMBER CO.

VENEERS

THAT ARE

UNIQUE, STRIKING, BEAUTIFUL



☛ The C. L. Willey Veneer plant recently secured three magnificent logs in the Liverpool market of unknown botany.

☛ In tone, texture and color they could readily pass for mahogany.

☛ In the faultless manner, for which the Willey plant is celebrated, they have been sliced into 1/28 veneers, ranging from 15 to 30 inches wide.

☛ The figure is a very large, broken, mottled stripe.

☛ The illustration in actual size from a small section of this wood in this column does not do it justice.

☛ There is only 150,000 feet of it. It will be sold at an attractive price, and it should go into the hands of some concern that wants to make a reputation for itself in a fine piece of interior finish or to a piano factory, which would be interested in something distinctly attractive for piano veneers.

☛ It's well worth a trip to the Willey plant to see this splendid wood.

☛ Both local and visiting buyers are cordially invited to call and inspect the Willey plant, and the contents of its big veneer and lumber warehouses on Robey St., near Blue Island avenue. Take Blue Island avenue car at the postoffice to Robey street.

C. L. WILLEY, Chicago

Largest Mahogany Veneer and Lumber Producing Plant in the World

Lumbermen here are watching with considerable interest the political situation and are awaiting with more or less anxiety the action of Congress in regard to lumber.

The furniture manufacturers in this section recently raised the price of their product twenty-five per cent, owing to the increase in the price of lumber which has shown no indications of weakness.

◀ INDIANAPOLIS ▶

The hardwood market locally and in the immediate vicinity is reported to be in a very satisfactory condition. A number of inquiries are coming in and quite a few orders are being placed. The volume of business is not unusually heavy, but it is about normal and much better than it was at this time last year.

Furniture manufacturers who have returned from the Grand Rapids and Chicago exhibits report that the outlook for their business is unusually good and this, of course, will be reflected in the business of the hardwood and veneer manufacturers.

Prices are steady and are slightly higher than they were at this time one year ago. There appears every reason to believe that a good trade in practically all grades of hardwoods may be expected during the next few months.

◀ MEMPHIS ▶

The hardwood market is in a very satisfactory position. There is a good demand and prices are well maintained as a general rule. There is exceptional strength in the lower grades of cottonwood and gum, which are in active request and which are offering in rather small quantities as compared with the demand therefor. The box factories are in the market for considerable quantities of gum and are unable to secure all their needs. Plain oak is also a strong feature. The demand is good in all grades and the offerings are not heavy. There has been no increased activity in quartered oak but the market is firmer. The upper grades of cottonwood and gum are in fairly active request, although there is not as much strength in these as in the case of the lower grades. Ash is in good demand and offerings are not free in dry stock. In fact some deliveries are being made before the lumber is thoroughly dried. Cypress is moving at a moderate rate. The lower grades are relatively firmer than the upper. Export demand is good and there is a disposition on the part of exporters here to anticipate a more liberal movement to Europe as soon as the railroads west of the Mississippi river have been forced to issue through bills of lading on lumber shipments. At present all of this business is being handled with large expense and much delay on local bills to ship side.

◀ NASHVILLE ▶

While Cumberland river floods have naturally curtailed the amount of the local hardwood lumber trade here for the past week and more, the tone of the market continues satisfactory, with active demands and numerous inquiries. The calls for oak are active. Chestnut and poplar are slower. Numerous rafts were scattered by the floods and many plants at least partially submerged by the high waters, but the river is again within its banks and heavy receipts of logs will soon be reported here. Railroad traffic is active, especially with the shipments of logs and lumber. Manufacturers are optimistic regarding the outlook for the present year. Prices are steady.

◀ KNOXVILLE ▶

The lumbermen in this vicinity are enjoying a very good business. They report that collections are getting easier; that they are finding ready sale for all classes of hardwood, and anticipate a very good business for the first half of 1913. There is a scarcity of hardwoods of dry stock in first hands, and the wholesalers are complaining that they are having considerable trouble in securing enough stock to fill their orders.

◀ BRISTOL ▶

Conditions in the lumber trade in this section continue favorable. The mills are more active than usual at this season of the year, due to the heavy demand for stocks and the fact that many of them are heavily oversold. The outlook is considered most favorable. Shipments of late have been heavy and a large volume of business is being done. It is believed that prices will improve steadily during the coming months.

◀ LOUISVILLE ▶

The hardwood lumber market is in an exceptionally strong position at present as the result of interruptions to manufacturing operations in most of the producing territory. The mills, especially the small ones out in the country, which have not much equipment for handling logs under bad conditions of weather, had a fine run of it through the fall and for a week or so in January, but since then have been put out of it by heavy rains, floods and all the rest of the happenings that are scheduled for this time of the year, and there will be nothing more stirring as far as making lumber is concerned until spring arrives. This applies to a good many fairly large-sized mills in the South, too, and means that the supply of lumber now on sticks must be regarded as the available market

supply until another season's crop has matured in the form of lumber ready to ship.

In view of the powerful demand for export lumber, on the one hand, and the prosperous condition of business with domestic consumers on the other, the prospects can hardly help favor rising hardwood values, and certainly the market has every reason to be firm and steady. Furniture manufacturers have found business so good that they are raising prices from five to ten per cent, as they have been justified in doing for some time. Vehicle manufacturers did that some time ago, and as the demand is present, they are doing a good business under better conditions as to profits. That makes for a freer movement of supplies and more aggressive manufacturing operations.

◀ ST. LOUIS ▶

Since Jan. 1 the hardwood situation has been quite satisfactory, both in the way of business and in prices. The demand has been good, much better than during any corresponding period for some time. Dry stock is very low and the demand is much better than the supply, in spite of the fact that mill operations have continued almost up to the first of the year.

Oak has been the best item in demand. Plain oak is particularly scarce. Quartered oak is also in big demand. Thick ash is much sought after. The result has been that high prices are obtainable for these three items. Red gum and cottonwood command satisfactory prices because of the scarcity. The cypress demand keeps up and is increasing right along. Buyers find this item hard to get and are willing to pay good prices for it, if obtainable. Those having a good stock on hand can get good prices, but are holding off anticipating a rise.

◀ MILWAUKEE ▶

The local hardwood trade is decidedly more active than it was a fortnight ago. Most of the manufacturing concerns have completed their annual inventories and now have time to think of purchasing lumber. Stocks at practically all the manufacturing plants are light and some good orders will have to be placed within the next few weeks. Coupled with this fact is the certainty that the coming building season will be practically as active as the past season, when all records in this city were broken. The feeling everywhere seems to be that 1913 will be a banner year for the hardwood trade.

Inquiries from various sources and actual orders are increasing daily, while dry lumber in nearly all lines is hard to get. Jobbers and retailers say that further price advances are sure to follow within the near future. Prices are firm in all lines. Dry birch is about exhausted here and manufacturers are looking for substitute woods, wherever possible. Most of the sash and door and furniture concerns are looking for birch in both upper and lower grades and are willing to pay good prices. The furniture manufacturers expect a good business from now on. The implement manufacturers in this city and vicinity are running full time and placing some good orders for hardwood.

The situation in both plain and quartered oak is about unchanged, with the supply almost exhausted. Southern concerns seem to be asking rather stiff prices and local buyers are inclined to proceed carefully. The demand for maple is strong. Basswood is moving well also.

◀ LIVERPOOL ▶

Market conditions here have not been very satisfactory for traders during the past month. The congested state of the Liverpool quays and the shortage of labor makes trade very difficult. At the present time there are a half-dozen steamers in dock which have been in port for over a fortnight without discharging their cargoes. Prices keep very firm, although one or two lines show signs of weakening. One of these is hickory. High prices have been paid and are being paid for several shipments which have arrived on consignment. The shipments, however, are heavy—too heavy in fact. The extent of them has had the tendency of frightening buyers. Shippers are warned not to send in any parcels of such large dimensions.

The mahogany position keeps keenly interesting and animated. All information seems to confirm the small extent of the timber stocks on the African coast, and it is predicted that prices will again advance at the next sales.

The round ash market is one of the finest here at the moment, especially with parcels of large dimensions. Brokers here are trying to force the price up. Ash lumber is good and finds a ready sale, especially with prime white ash stocks. No. 1 common stocks are also good, but buyers here complain of the widths this stock is sold in—it is too narrow for this market. If shippers could send No. 1 common ash 6" and up wide, the stock would find more ready acceptance. The 4"x5" pieces are practically useless and this renders the value of No. 1 common stocks on a much lower basis. Shippers are advised to send in the wider widths even though the grading rules permit the 4"x5" pieces.

Poplar stocks are a good point and find favor with most merchants at enhanced prices, as also do shipments of prime oak, both plain and quartered. Birch is scarce. Cottonwood boards in wide widths 1"x18" and up are a good point and are bringing good prices for prime stock. There is also a good market for No. 1 common wide stocks. Wide sap gum stocks are also being imported in greater volume. Tupelo gum is in more favor, particularly in 5/8" stock.

On the Following Stock We Will Make Special Prices for Prompt Shipment:

67,000 ft. 1" No. 1 Common Poplar	69,000 ft. 1 1/2" S. W. and No. 2 Com. Chestnut
11,000 ft. 2" No. 2 Common Poplar	522,000 ft. 1 1/2" S. W. and No. 2 Com. Chestnut
19,000 ft. 1 1/4" No. 1 and 2 Qrd Poplar	40,000 ft. 1x12" and up No. 1 and 2 Chestnut
45,000 ft. 1x12" and up No. 1 and Panel Poplar	19,000 ft. 1" No. 1 Com. Chestnut
30,000 ft. 3x8 to 20 No. 1 and 2 Poplar	33,000 ft. 1 1/4" No. 1 Com. Chestnut
15,000 ft. 1x18" and up No. 1 and Panel Poplar	41,000 ft. 1 1/2" No. 1 Com. Chestnut
55,000 ft. 5 8x18" and up No. 1 and Panel Poplar	32,000 ft. 2" No. 1 Com. Chestnut
151,000 ft. 1" S. W. and No. 2 Com. Chestnut	45,000 ft. 1 1/2" No. 2 Plain Oak
	198,000 ft. 2" No. 2 Com. Plain Oak
	60,000 ft. 1 1/2" No. 1 Com. Plain Oak

The Atlantic Lumber Co.

70 Kilby Street, Boston, Mass.

Keys-Walker Lumber Co.

MANUFACTURERS

West Virginia Hardwoods Soft Yellow Poplar

Oak—Chestnut—Bass—Hemlock, Etc.

Rough or Dressed

Write for Prices

ROANOKE, VIRGINIA

TIMBER TALKS

THERE ARE POINTERS FOR YOU

In the new book we have just issued. If you have not received a copy, send for one, using the form given.

In "Pointers" we treat of timber investments and values in a general way. Particular kinds or tracts of timber in different localities are not considered in detail.

We have given a glimpse of the facilities of our organization in this book, but are holding in reserve a big supply of

POINTERS

about timber in all sections of North America, including the particular locality in which you may be interested.

Our organization is equipped to make preliminary examinations or detailed reports on timber in any locality. We shall be glad to co-operate with you in making that next deal and are satisfied we can aid you to reach a decision whether you wish to buy or sell.

JAMES D. LACEY & CO.

TIMBER LAND FACTORS

Chicago, 1215 Old Colony Bldg. Seattle, 1009 White Bldg.
Portland, 1104 Spalding Bldg.

JAMES D. LACEY & CO.

1215 Old Colony Building, Chicago, Ill.

Gentlemen: Please send copy of Pointers to

Name

Street or Office

City State

Clip above form and mail today.

Form O

W H Y ?

WHY DO more than 320 of the most prominent and successful lumber manufacturers exchange nearly \$26,000,000 of indemnity against fire loss at

Manufacturing Lumbermen's Underwriters

B E C A U S E !

BECAUSE it is the oldest and strongest inter-insurance association among lumbermen, being now in its fourteenth year.

BECAUSE \$728,910.41 cash savings have been returned to members.

BECAUSE \$756,787.21 cash surplus, owned entirely by the members, has been accumulated.

BECAUSE \$2,012,427.96 has been paid in losses under prompt and equitable adjustments without resort to quibbling or technical controversy.

BECAUSE it was the first to settle lumber losses on a market value basis.

BECAUSE the regular, frequent and thorough inspections given the plants of all members help them to prevent fires, thus materially reducing both the fire waste and the cost of indemnity.

FOR FULL PARTICULARS ADDRESS

Western Representative
HARRY B. CLARK,
Portland, Ore.

Harry Rankin & Co.
Attorney in Fact,
KANSAS CITY, MO.

Advertisers' Directory

NORTHERN HARDWOODS.

American Lumber & Mfg. Co.....	12
Beecher & Barr.....	12
Buffalo Hardwood Lumber Co.....	67

Coale, Thos. E., Lumber Company..	12
Cobbs & Mitchell, Inc.....	3
Craig, W. P., Lumber Co.....	13
Curll, Daniel B.....	12

Darling, Chas. & Co.....	55
--------------------------	----

East Jordan Lumber Company.....	60
Elias, G., & Bro.....	67
Estabrook-Skeele Lumber Co.....	4

Flanner-Steger Land & Lumber Co.	
Forman, Thos., Company.....	60

Goodyear, C. A., Lumber Co.....	66
---------------------------------	----

Hanson-Turner Company.....	62
Heyser, W. E., Lumber Co.....	11
Holyoke, Chas.....	13
Holloway Hardwood Lumber Co.....	2

Jones Hardwood Company.....	13
-----------------------------	----

Kent, J. S., Company.....	12
Klann, E. H.....	55
Kneeland-Bigelow Company, The...	3

Litchfield, William E.....	13
----------------------------	----

McIlvain, J. Gibson, & Co.....	2
McLean, Hugh, Lumber Co.....	67
McParland Hardwood Lumber Co...	55
Miller, Anthony.....	67
Mitchell Bros. Company.....	3
Mowbray & Robinson.....	11

Oelhafen Lumber Company.....	66
Osgood & Richardson.....	55

Palmer & Parker Co.....	12
-------------------------	----

Sawyer-Goodman Company.....	66
Schultz, Holloway Co.....	4
Smith, Fred D.....	55
Standard Hardwood Lumber Co.....	67
Stearns Salt & Lumber Company...	8
Stephenson, I., Company, The.....	60
Stewart, I. N., & Bro.....	67
Stimson, J. V., & Co.....	64
Struthers Cooperage Company.....	60
Sullivan, T. & Co.....	67

Tegge Lumber Co.....	
----------------------	--

Vinke, J. & J.....	13
VonPlaten Lumber Co.....	60

Webster, George, Lumber Company.	13
White, Wm. H., Co.....	68
Wiggin, H. D.....	12
Williams, Ichabod T., & Sons.....	14
Willson Bros. Lumber Company.....	12
Wistar, Underhill & Nixon.....	12
Wood-Mosaic Company.....	13
Yeager, Orson E.....	67
Young, W. D., & Co.....	3

POPLAR.

Anderson-Tully Company.....	9
Atlantic Lumber Company.....	51
Farrin, M. B., Lumber Company.....	49
Faust Bros. Lumber Company.....	14
Kentucky Lumber Company.....	9
Keys-Walker Lumber Company.....	51
Logan, J. M., Lumber Co.....	6
Maphet & Shea Lumber Company...	6
Radina, L. W., & Co.....	11

Swan-Day Lumber Company.....	19
Vansant, Kitchen & Co.....	68
West Virginia Timber Company.....	7
Whiting, Wm. S.....	65
Wood, R. E., Lumber Company.....	13
Yellow Poplar Lumber Company.....	68

SOUTHERN HARDWOODS.

American Lumber & Mfg. Co.....	12
Anderson-Tully Company.....	9
Atlantic Lumber Company.....	51

Baker-Matthews Mfg. Co.....	65
Bennett & Witte.....	11
Bluestone Land & Lumber Co.....	48
Boice Lumber Company.....	64
Booker-Cecil Company.....	5
Bradley, E. C., Lumber Company.....	49
Brown, W. P., & Sons Lumber Co...	5
Buffalo Hardwood Lumber Co.....	67

Carrier Lumber & Mfg. Co.....	14
Cherokee Lumber Co.....	7
Coale, Thos. E., Lumber Company.....	12
Conasauga Lumber Company.....	49
Crane, C., & Co.....	49
Curll, Daniel B.....	12

Darling, Chas., & Co.....	55
Davis, Edward L., Lumber Company	5
Dempsey, W. W.....	65
Duhlmeier Brothers.....	11

Elias, G., & Bro.....	67
Estabrook-Skeele Lumber Co.....	4

Farrin, M. B., Lumber Company.....	49
Faust Bros. Lumber Co.....	14
Flanner-Steger Land & Lumber Co.	

Garetson-Greaseon Lumber Co.....	65
Hamilton, J. V.....	64
Heyser, W. E., Lumber Company.....	11
Hill Brothers Tie & Lumber Co.....	64
Himmelberger-Harrison Lumber Co.	65
Hitt, H. H., Lumber Company.....	64
Holloway Hardwood Lumber Co.....	2
Huddleston-Marsh Lumber Co.....	

Johns-Mowbray-Nelson Company ..	49
Kennedy, James, & Co.....	49
Kent, J. S., Company.....	12
Kentucky Lumber Co.....	9
Keys-Walker Lumber Co.....	51
Kimball & Kopcke.....	6
Klann, E. H.....	55
Kosse, Shoe & Schleyer Company...	49

Lamb-Fish Lumber Co.....	8
Litchfield, William E.....	13
Littleford, George.....	49
Little River Lumber Company.....	68
Logan, J. M., Lumber Co.....	6
Louisiana Long Leaf Lumber Co....	64
Louisville Point Lumber Company..	5

Maley, Thompson & Moffett Co.....	11
Maphet & Shea Lumber Company...	6
McIlvain, J. Gibson, & Co.....	2
McLean, Hugh, Lumber Co.....	67
McParland Hardwood Lumber Co....	55
Miller, Anthony.....	67
Mowbray & Robinson.....	11

Norman Lumber Company.....	5
Ohio River Saw Mill Company.....	5
Osgood & Richardson.....	55

Paepoke-Leicht Lumber Company..

Radina, L. W., & Co.....	11
Ransom, J. B., & Co.....	7
Reinhardt Lumber Company.....	49
Richey, Halsted & Quick.....	49
Russe & Burgess, Inc.....	14

Salt Lick Lumber Company.....	65
Shiels, Chas. F., & Co.....	49
Slaymaker, S. E., & Co.....	48
Smith, Fred D.....	55
Standard Hardwood Lumber Co.....	67
Stewart, I. N., & Bro.....	67
Stimson, J. V., & Co.....	64
Sullivan, T., & Co.....	67
Swan-Day Lumber Company.....	49

Tennessee Hardwood Lumber Co....	7
Three States Lumber Company.....	48

Vestal Lumber & Manufacturing Co.	6
Vinke, J. & J.....	13
Von Platen Lumber Co.....	60

Webster, George, Lumber Company.	13
West Virginia Timber Company.....	7
Whiting, Wm. S.....	65
Whitmer, Wm., & Sons.....	12
Wiggin, H. D.....	12
Williams, Ichabod T., & Sons.....	14
Willson Bros. Lumber Company.....	12
Wistar, Underhill & Nixon.....	12
Wood-Mosaic Company.....	13
Wood, R. E., Lumber Company.....	13

Yeager, Orson E.....	67
----------------------	----

VENEERS AND PANELS.

Adams & Raymond Veneer Co.....	61
Ahnapee Veneer & Seating Co.....	62
Astoria Veneer Mills & Dock Co....	63
Central Veneer Company.....	64
Gorham Brothers Company.....	62
Hanson-Turner Company.....	62
Hoffman Bros. Company.....	61
Huddleston-Marsh Lumber Co.....	61
Jarrell, B. C., & Co.....	61
Kentucky Veneer Works.....	61
Kiel Wooden Ware Company.....	62
Knoxville Veneer Company.....	6
Louisville Veneer Mills.....	5
Maley, Thompson & Moffett Co.....	11
Mengel, C. C., & Bro. Company.....	5
Ohio Veneer Company.....	49 & 61
Penrod Walnut & Veneer Co.....	61
Putnam Veneer and Lumber Co.....	63
Rayner, J.....	4
Rice Veneer & Lumber Company...	61
Southern Veneer Manufacturing	
Company.....	63
Underwood Veneer Company.....	63
Veneer Manufacturers' Company...	63
Walker Veneer & Panel Co.....	55
Willey, C. L.....	50
Williams, Ichabod T., & Sons.....	14
Wisconsin Seating Company.....	62
Wood-Mosaic Company.....	13

MAHOGANY, WALNUT, ETC.

Astoria Veneer Mills & Dock Co....	63
Dahlmeier Brothers.....	61
Hamilton, J. V.....	64
Huddleston-Marsh Lumber Co.....	64
Littleford, George.....	49
Maley, Thompson & Moffett Co.....	11
Mengel, C. C., & Bro. Company.....	5
Palmer & Parker Co.....	12

Penrod Walnut & Veneer Co.....	61
Purcell, Frank.....	65
Rayner, J.....	4
Struthers Cooperage Company.....	60
Willey, C. L.....	50
Williams, Ichabod T., & Sons.....	14

HARDWOOD FLOORING.

Beecher & Barr.....	12
Carrier Lumber & Mfg. Co.....	14
Cobbs & Mitchell, Inc.....	3
Eastman, S. L., Flooring Co.....	60
Farrin, M. B., Lumber Company.....	49
Forman, Thos., Company.....	60
Kerry & Hanson Flooring Co.....	60
Louisiana Long Leaf Lumber Co....	64
Mitchell Bros. Company.....	3
Robbins Lumber Co.....	66
Salt Lick Lumber Company.....	65
Stearns Salt & Lumber Company...	8
Stephenson, I., Company, The.....	60
Webster Lumber Co., George.....	13
White, Wm. H., Co.....	68
Wilce, T., Company, The.....	4
Young, W. D., & Co.....	3

WOODWORKING MACHINERY.

Cadillac Machine Co.....	58
Linderman Machine Co., The.....	
Mershon, W. B., & Co.....	57
Phoenix Manufacturing Co.....	58
Saranac Machine Company.....	58
Steinmetz, C. M.....	13
Westinghouse Electric & Mfg. Co ..	

LOGGING MACHINERY.

Baldwin Locomotive Wks.....	
Clyde Iron Works.....	59
Lidgerwood Mfg. Co.....	57
Russel Wheel & Foundry Co.....	

DRY KILNS AND BLOWERS.

Grand Rapids Veneer Works.....	57
Phila. Textile Mch. Co.....	12

SAWS, KNIVES AND SUPPLIES

Atkins, E. C., & Co.....	
Simonds Mfg. Co.....	

LUMBER INSURANCE.

Central Manufacturers' Mut. Ins. Co.	
Epperson, U. S.....	11
Indiana Lumbermen's Mut. Ins. Co.,	48
Lumber Mutual Fire Insurance Co..	61
Lumbermen's Mutual Ins. Co.....	
Lumbermen's Underwriting Alli-	
ance.....	
Lumber Underwriters.....	14
Pennsylvania Lumbermen's Mutual	
Fire Ins. Co.....	63
Rankin, Harry & Co.....	52

TIMBER LANDS.

Lacey, James D., & Co.....	51
Spry, John C.....	4

MISCELLANEOUS.

American Freight Audit & Storage	
Company.....	48
Astoria Veneer Mills & Dock Co....	63
Childs, S. D., & Co.....	55
Gerlach, The Peter, Company.....	55
Lumbermen's Credit Association...	4
Mechanical Rubber Company.....	58
Tamms Silica Company.....	55
Wausau Advancement Association..	2
Westinghouse Electric & Mfg. Co...	

CLASSIFIED ADVERTISEMENTS

Advertisements will be inserted in this section at the following rates:

For one insertion.....20c a line
For two insertions.....35c a line
For three insertions.....50c a line
For four insertions.....60c a line

Eight words of ordinary length make one line. Heading counts as two lines. No display except the headings can be admitted.

Remittances to accompany the order. No extra charges for copies of paper containing the advertisement.

EMPLOYES WANTED

WANTED SALESMAN

To handle new line, or give full time. New proposition. Give reference and experience.
BOX 416, Cincinnati, O.

EMPLOYMENT WANTED

WANTED POSITION AS

Lumber Salesman by man 38 years old. Past experience; 15 years as foreman in furniture factory. Understand lumber thoroughly. Address, "BOX 129," care HARDWOOD RECORD.

WANTED—EMPLOYMENT

When you want a salesman for New York state territory, write us. We can supply you with a good man. EMPIRE STATE ASSOCIATION of Wholesale Lumber & Sash & Door Salesmen. Chas. Johnson, Sec'y, 96 Kirkland Rd., Rochester, N. Y.

TIMBER ESTIMATING

TIMBER ESTIMATES

Estimating Southern timber a specialty. Maps, detailed reports as to stand, quality and logging conditions. Have a few high-class properties for sale. Can furnish best references.

THOS. J. McDONALD,
East Tenn. Natl. Bank Bldg.,
Knoxville, Tenn.

WAGON STOCK WANTED

I AM IN THE MARKET FOR

75 to 100 cars of oak poles, bolsters, sand boards, eveners, and reaches; and hickory and maple axles. Will inspect at shipping point, and pay cash. E. B. BROWN, 372 Bayne St., Buffalo, N. Y.

LOGS WANTED

WANTED—BLACK WALNUT LOGS

500 cars good black walnut logs, 10" and up in diameter, 6 ft. and up long. Will inspect at shipping point and pay cash.

GEO. W. HARTZELL, Dayton, Ohio.

WANTED—HARDWOOD LOGS

200,000 ft. 28" and up White Oak logs.
200,000 ft. 12" and up Walnut logs.
50,000 ft. 12" and up Cherry logs.
C. L. WILLEY, 2558 S. Robey St., Chicago.

TIMBER LANDS FOR SALE

FOR SALE—1375 ACRES OF TIMBER

Close to the "Forks" of the Ontonagon River, in Ontonagon Co., Mich. This is mostly a cedar proposition and could nicely be lumbered and floated down the river. Balance of timber pine, birch, basswood, elm, ash, spruce and hemlock. Also have 400 acres of hardwood virgin timber located in Iron Co., Mich. Address
A. P. HUELLMANTEL, Traverse City, Mich.

FOR SALE

700 acres of well timbered land, consisting chiefly of Southern poplar, hickory and other hardwoods, near Manchester, Tenn. Land is underlaid with coal. Will sell timber only, or timber and land together. K. McKENZIE, Owner, 619 Andrus Bldg., Minneapolis, Minn.

ARE YOU INTERESTED IN GUM and Red Oak?

I own in fee simple two small and carefully selected tracks of high-class gum and red oak stumpage. Will sell at price to make the buyer good money either as an investment or as an operating proposition.

Will deal with principals only. Address in confidence, "BOX 22," care HARDWOOD RECORD.

TIMBER LANDS WANTED

WANTED TO BUY

400 or 500 acres of good hardwood timberland, mostly oak and ash, suitable for bending purposes. Address

"BOX 125," care HARDWOOD RECORD.

LUMBER FOR SALE

PLAIN AND QUARTER-SAWED OAK

For sale, 1/20, 1/16, 1/8, 1/4, 1/2, 3/4, to 12/4 thick.
C. F. WHISLER, Hillsboro, O.

OAK, POPLAR, ASH

and all other hardwoods, in all grades and thicknesses, can be readily sold if advertised in the Wanted and For Sale section of HARDWOOD RECORD. If you have a large stock you want to sell try a few lines in this department and see what a lot of inquiries they will bring you.

FOR SALE

Car Curly Poplar, largely 4/4.
2 cars 4/4 No. 1 Common Poplar
3 cars 8/4 No. 2 Common Poplar
Address P. O. BOX 174, Hickory, N. C.

DIMENSION STOCK WANTED

WANTED—A LARGE QUANTITY

Of good hard maple and hickory billets. 2 1/2" and 2 3/4" square, 48", 54", 60", 66" and 72" long. J. H. STILL MFG. CO. LTD., St. Thomas, Ont., Canada.

WANTED

1" Oak dimension stock, 3 1/2" and up random width, 34 1/2" and 44" long. One face clear. Also 1 1/2"x2x46" clear Oak Posts. JACOB JAECKLE FURN. CO., Buffalo, N. Y.

WANTED

DIMENSION OAK

Plain and Quartered

Various sizes for chair and table factories.

Send to us for specifications and prices.

INDIANA QUARTERED OAK CO.

7 East 42nd Street,
New York.

BIRCH SQUARES WANTED

We wish a carload of Birch Squares, 2"x2" x22 1/2" straight clear stock. Quote price per 1,000 delivered here. THOMAS ORGAN & PIANO COMPANY, Woodstock, Ont.

LUMBER WANTED

WANTED

Hickory in car lots. Suitable for making handles. Specify percentage of whitewood, and quote price to ST. MARYS WOOD SPECIALTY CO., LIMITED, St. Marys, Ontario, Canada.

WANTED

2 cars 5/4 FAS Northern Soft Elm 7" and up wide. Several cars 8/4 FAS and No. 1 Com. Northern Soft Elm. Address

"BOX 128," care HARDWOOD RECORD.

THE GOSHEN MFG. CO.,

Goshen, Ind., is in the market for a quantity of Dimension Beech lumber.

BUYERS OF HARDWOODS.

Do you want to get in touch with the best buyers of hardwood lumber? We have a list, showing the annual requirements in lumber, dimension stock and veneers and panels of consumers of those materials throughout the United States and Canada. The service is free to advertisers in the RECORD. It will interest you. Write us for further information about our "Selling Lumber by Mail System."

HARDWOOD RECORD, Ellsworth Bldg.,
Chicago.

BUSINESS OPPORTUNITIES

FOR SALE

Plant, real estate, power, blower, heating, lighting and machinery equipment of the Pillsbury & Baldwin Co., manufacturers of tanks and seats. New factory building with 22000 square feet floor space, Andrews dry kiln. Two railroad sidings, in the heart of the native timberlands, every detail up to the minute. Write for descriptive circular, terms, etc.

PILLSBURY & BALDWIN CO., St. Johnsby, Vt.

OVER 100 FAMILIES

Living in tents around Henryetta, Oklahoma. Not a vacant room or building in the district. The Henryetta Development Co. offers inducements and guarantees to the man or men who will erect 100 three, four and five room houses. Address E. B. MILLER, Sec'y, Henryetta Development Co., Henryetta, Oklahoma.

EXCELLENT OPPORTUNITY

for man to go in manufacturing business. Have well-equipped hardwood factory suitable for making spokes and vehicle stock. Healthy location in town six thousand, on two rivers and two railroads. Address

"BOX 72," care HARDWOOD RECORD.

PARTNERSHIP INTEREST FOR SALE

Non-resident partner in Hardwood Manufacturing company will dispose of controlling interest.

Address "BOX 120," care HARDWOOD RECORD.

WANTED

To correspond with a reliable and competent manufacturer of hardwood lumber, who has a mill and wants a location in the Gulf states.

Address ROBINSON LUMBER CO.,
717 Whitney Bank Bldg., New Orleans, La.

MACHINERY FOR SALE**FOR SALE**

- 1 Berlin band resaw No. 284.
- 1 Jointer attachment for same.
- 1 Berlin double surfacer No. 177.
- 1 Berlin single inside moulder No. 15.
- 1 Berlin twin matcher No. 46.
- 1 Circular bevel siding resaw, Fay & Egan No. 1.
- 1 Fay & Egan 9" outside moulder No. 181.
- 1 8" Smith inside moulder.

The above machinery all in strictly first-class condition and modern. Offering for sale on account of change in our product. Will be sold cheap for cash. For further particulars address YELLOW POPLAR LBR. CO., Coal Grove, O.

FOR SALE

One 80 H. P. high pressure boiler; one 60 H. P. side crank engine, both Houston, Stanwood & Gamble make with all connections complete; Gordon Hollow Blast grates, blower, Worthington duplex pump, Marsh steam head, Bissell dynamo. All new, out of factories 18 months only.

Also one American No. 2 self-feed ripper. One three-saw tower edger, one 30" Bucyrus exhaust fan. One Sinker-Davis double circular mill, new.

For information write to

BOX 188, Gillett, Ark.

FOR SALE CHEAP

One No. 88 new Berlin matcher. Inquire of GEO. E. SPRY, 1003 Harris Tr. Bldg., Chicago.

FOR SALE

3 hydraulic veneer presses; five pumps, 2 and 3 plunger; 12 pumps, single; 190 retainers; 1 glue roll. All well-known makes. Cheap.

CHAS. F. ELMES ENGINEERING WORKS,
228 N. Morgan St., Chicago.

MISCELLANEOUS**FOR RENT—CINCINNATI YARD**

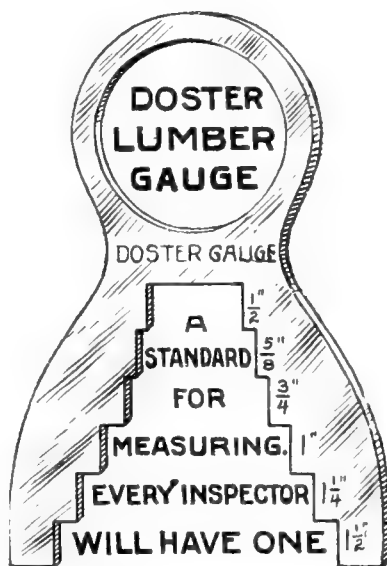
150X100' on Southern R. R. Yard, Cincinnati, Ohio. T. P. SCOTT & CO., Cincinnati, O.

WANTED—HARDWOOD LUMBERMEN—

to try the Gibson Tally Book. The three-throw aluminum tally ticket cover accommodates any form of ticket desired. The use of the special triplicate tally ticket supplied, printed on water proof paper with carbon backs makes tallies unalterable. For durability, convenience, accuracy and for systematizing the inspection of lumber the Gibson tally method can't be beat.

Special forms of tally tickets mailed on application. Covers sold on approval to responsible concerns.

HARDWOOD RECORD,
537 So. Dearborn St., Chicago.



For sale by HARDWOOD RECORD,
537 S. Dearborn St., Chicago, Ill.
50 CENTS EACH.

Gerlach Modern Machines
Produce the Cheapest Saw Work
COOPERAGE STOCK
and **BOX SHOOKS**
Circular, Band and Cylinder Saws
SAW AND LOG TOOLS
THE PETER GERLACH CO., Cleveland, 6th City, U.S.A.

C H I C A G O**E. H. KLANN**

Cottonwood, Gum, Oak, Ash, Cypress, Yellow Pine, Dimension Stock

819 FISHER BLDG.

HAR. 1187

Osgood & Richardson
935 Peoples Gas Bldg.

**NORTHERN AND SOUTHERN
HARDWOODS**

Chicago Agents: LAMB-FISH LUMBER CO.

Telephone Canal 1688

CHAS. DARLING & CO.
HARDWOOD LUMBER
22nd Street and Center Avenue
CHICAGO

**McParland Hardwood
Lumber Co.** 2204 S. Laflin St.
HARDWOODS

FRED D. SMITH
HARDWOOD LUMBER

1337-1343 North Branch St. CHICAGO

A Veneer Gauge is the answer to a Veneer User's craving for years. This "Walker Brand" Veneer Gauge is a steel gauge that will satisfy your wants for all time. You can't do yourself a better turn than to buy one of these gauges. It gauges ACCURATELY every thickness from 1/40 inch to 1/2 inch INCLUSIVE. Wake up to this opportunity. Price only \$1.98 delivered by U. S. Mail. Order now, today. Address—6456 Woodlawn Ave. Phone Hyde Park 35.

Dept. C **BIRDSEYE**
CHICAGO

99% PURE
SILICA
OR SILEX FOR WOOD FILLERS
TAMMS SILICA CO., 19 So. 5th Ave., Chicago

COUNTERFEIT CHECKS

are frequent except where our

Two Piece Geometrical Barter Coin is in use, then imitation isn't possible. Sample if you ask for it.

S. D. CHILDS & CO.
Chicago

We also make Time Checks, Stencils and Log Hammers.

Doesn't It Look Good To You?

2 4 7 10 11 13 14 15 17 19 20

MICHIGAN, GRAND RAPIDS: Stow & Davis Furniture Company; tables: George A. Davis, buyer; 40,000 feet 4/4 basswood; 15,000 feet 4/4 red birch; 30,000 feet 4/4 and 8/4 mahogany; 30,000 feet 4/4 cull gray elm; 20,000 feet 5/4 and 6/4 soft maple; 25,000 feet 4/4 plain red oak; 75,000 feet 4/4 plain white oak; 200,000 feet 4/4 quartered white oak; 20,000 feet 4/4 poplar; 50,000 feet red gum, all thicknesses. Dimension stock: Buyers of 3x3-30 oak squares. Panel stock: Buyers of 5-ply quartered oak and mahogany table tops.

HARDWOOD RECORD CHICAGO

Specimen of one of the thousands of patented tabbed index cards involved in Hardwood Record's copyrighted Information Service, showing annual requirements for Lumber, Dimension Stock, Veneers and Panels employed by wholesalers and hardwood manufacturing consumers throughout the United States and Canada.

ILLINOIS

Key

1	Ash	12	Hickory
2	Basswood	13	Mahogany
3	Beech	14	Maple
4	Birch	15	Oak
5	Butternut	16	Walnut
6	Cherry	17	Poplar
7	Chestnut	18	Miscellaneous including
8	Cottonwood		Dogwood, Holly, Locust,
9	Cypress		Persimmon, Sycamore.
10	Elm	19	Dimension stock
11	Gum	20	Veneers and panel stock



Illustration of Oak Cabinet in which this Information Service is filed.

Fac-simile of state key card between which the tabbed information cards are filed alphabetically by towns, by means of which instant reference can be made to the buyers of any kind of wood, in any locality in the United States and Canada.

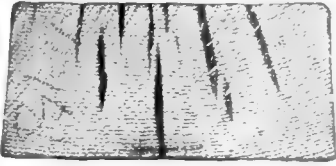
THIS service is comprised in more than fifty bulletins, and additional bulletins of corrections and additions are printed frequently.

This service is kept positively up-to-date, and is indispensable to lumber and veneer sales departments.

It is an exclusive service disposed of only to HARDWOOD RECORD advertisers.

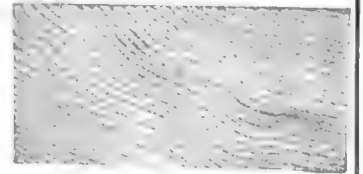
LET US TELL YOU ABOUT THE MODERATE COST

Hardwood Record, 537 South Dearborn Street, Chicago



Lumber Dried As Never Before SEE THE DIFFERENCE

GRAND RAPIDS DRY KILN
GRAND RAPIDS VENEER WKS., SOLE MFRS., MICHIGAN



HARDWOOD RECORD'S

strongest circulation is in the region where things are made of wood—WISCONSIN, MICHIGAN, ILLINOIS, INDIANA, OHIO, PENNSYLVANIA, NEW YORK and the East.

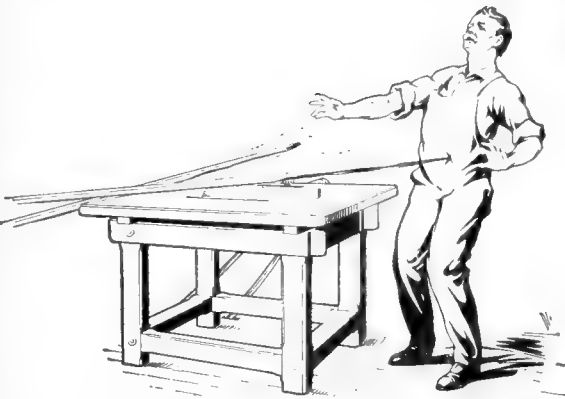
IT'S the BEST SALES MEDIUM for HARDWOOD LUMBER

MORE THAN 2,000 LUMBERMEN

OF THE LUMBERMEN OF THE NORTH
AND THE LUMBERMEN OF THE SOUTH
STILL ARE NOT SATISFIED WITH THE
SOLUTION OFFERED BY THE RECORD

HARDWOOD RECORD

CHICAGO



Dangerous Circular Ripsaws.

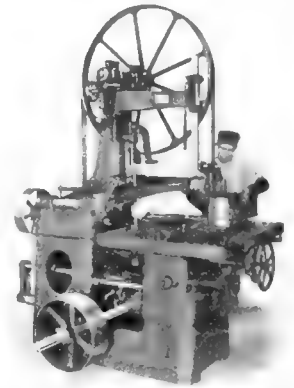
Avoid Liability

And risks of maiming
your employees. Use
our Power Feed Band
Ripsaw

A Specialty - Not a Side Line

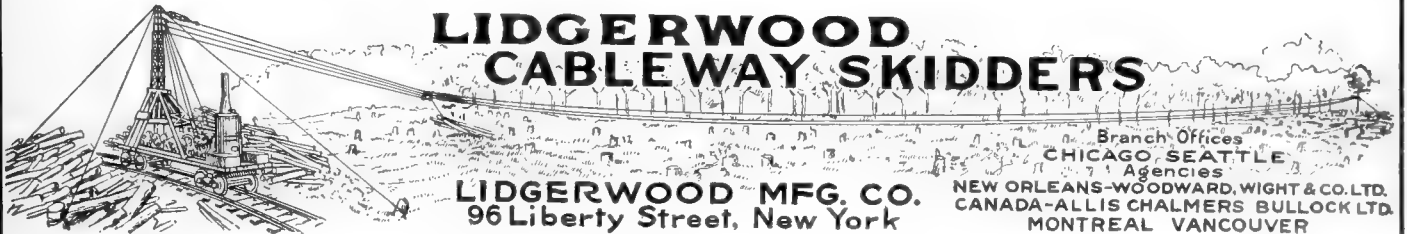
WM. B. MERSHON & CO.

SAGINAW, MICHIGAN



Power Feed Band Ripsaw No. 1

The CHEAPEST HARDWOOD LOGGING IS DONE WITH



LIDGERWOOD CABLEWAY SKIDDERS

LIDGERWOOD MFG. CO.
96 Liberty Street, New York

Branch Offices
CHICAGO, SEATTLE
Agencies
NEW ORLEANS—WOODWARD, WIGHT & CO. LTD.
CANADA—ALLIS CHALMERS' BULLOCK LTD.
MONTREAL VANCOUVER

IF YOU HAVEN'T SEEN THE GIBSON TALLY BOOK

Let us send you one on approval, with samples of Tally Tickets for triplicate, duplicate or single tallies—a score of forms to choose from. They are the latest and best. Endorsed by hundreds of lumber manufacturers and buyers.

HARDWOOD RECORD

CHICAGO

Broom Handle

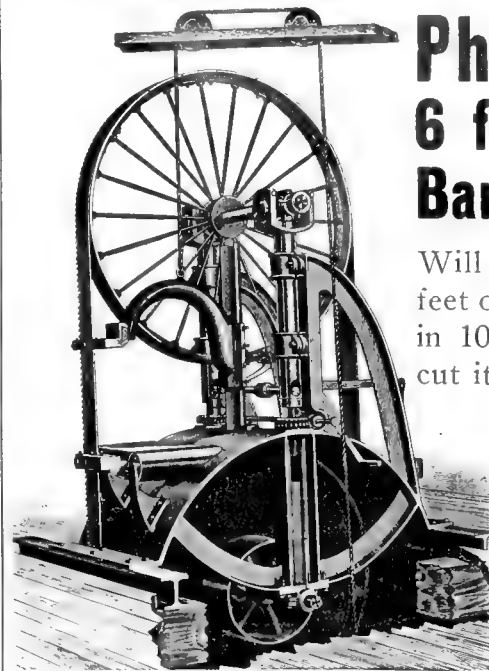
CHUCKING AND BORING MACHINE



It rounds end of handle and bores small hole in other end automatically at same time. Capacity, 45,000 handles in ten hours. All the operator has to do is to keep the handles fed to the machine. Used by the largest producers. Write for details and price.

CADILLAC MACHINE CO.

Makers of Handle Makers Tools. CADILLAC, MICHIGAN



Phoenix

6 ft. Pony Band Mill

Will cut 30,000 feet of 1" lumber in 10 hours and cut it good.

Nearly 200 of these mills sawing wood in the U. S. A.

PRETTY GOOD RECOMMENDATION, ISN'T IT?

MODERATE PRICE

PHOENIX MFG. CO.

EAU CLAIRE

WISCONSIN

ELEPHANT RUBBER BELTING

AIR DRILL AND AIR TOOL

HOSE

STEAM
WATER
SUCTION

EXTRA QUALITY

Recommended for hard service and guaranteed to do the work

SELLING AGENTS

CRANE COMPANY - ALL BRANCHES
STANDARD EQUIPMENT CO., MOBILE, ALA.
ALBANY MILL SUPPLY CO., ALBANY, GA.

THE MECHANICAL RUBBER COMPANY

(Chicago Rubber Works)



307 W. Randolph Street, CHICAGO
ESTABLISHED 1882

Corrugated Joint Fasteners

Can be quickly and cheaply driven with

"ADVANCE" CORRUGATED JOINT FASTENER MACHINE

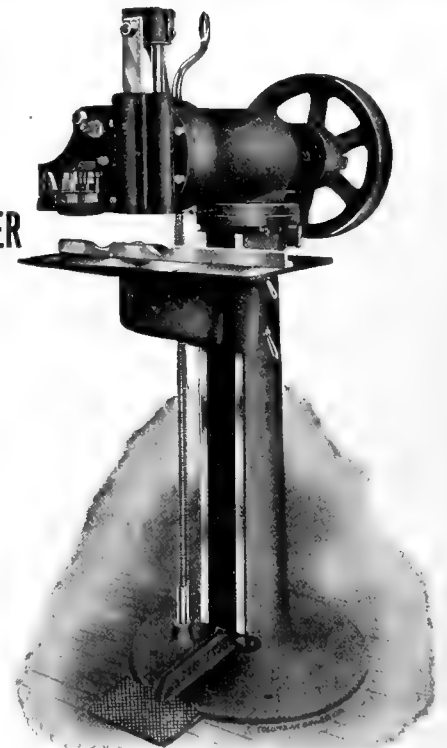
Made in Different Types to Meet All Conditions

Specially suitable for manufacturers of sash, doors, blinds, screens, coffins, furniture, plumbers' wood-work, porch columns, boxes, refrigerators, etc.

Write for bulletins and prices.

Manufactured only by

Saranac Machine Co., St. Joseph, Michigan



One of the largest hardwood operators in the U. S. says:

TO THE EDITOR OF THE HARDWOOD RECORD:
 I have just received your issue of the 1st of May, 1934, and am very glad to see that you are still publishing the "Clyde Self-Propelling Skidder" advertisement. I have been using the Clyde Skidder for some time and am very satisfied with it. It is a very good machine and I have no doubt that it will continue to be a success for many years to come. I am sure that you will find it very interesting to read about the Clyde Skidder and its many uses. I am sure that you will find it very interesting to read about the Clyde Skidder and its many uses. I am sure that you will find it very interesting to read about the Clyde Skidder and its many uses.

(Copy of complete letter sent on request)

You should investigate the Clyde Self-Propelling Skidder

It means more logs for less money than by any other method—and we can prove it!

CLYDE IRON WORKS Manufacturers, at Duluth, Minn., U. S. A.,
of CLYDE-GRADE Logging Machinery

"Call for our new Catalog No. ONE!"

**IF YOU WANT THE BEST SYSTEM OF ACCURATELY TALLYING AND
RECORDING LUMBER SHIPMENTS OR RECEIPTS**

YOU WILL BE INTERESTED IN

The Gibson Tally Book

This system of tallying lumber is employed by more than two thousand lumber producers, jobbers and wholesale consumers, and is available for tallying lumber, logs, flooring, dimension stock and all other commodities.

Makes three **original** tallies without the use of loose carbon sheets.

New Catalogue showing twenty-six various forms of tickets sent free on request.

Tally Book Dept., Hardwood Record, Chicago

MICHIGAN

FAMOUS FOR HARD MAPLE AND GREY ELM

"Ideal" Steel Burnished Rock Maple Flooring

is the flooring that is manufactured expressly to supply the demand for the best. It is made by modern machinery from carefully-selected stock and every precaution is taken throughout our entire system to make it fulfill in every particular its name—"IDEAL."

ROUGH OR FINISHED LUMBER—ALL KINDS

Send Us Your Inquiries

The I. Stephenson Company - **WELLS, MICHIGAN**

Von Platen Lumber Co.

Iron Mountain, Michigan

MANUFACTURERS OF

BIRCH BASSWOOD ELM MAPLE

75,000 feet 5/4 No. 1 and 2 common Maple

100,000 feet 6/4 No. 1 and 2 common (Large-ly No. 1 common) Maple

25,000 feet 5/4 No. 2 Com. and better Birch

40,000 feet 8/4 No. 3 common Rock Elm

We Solicit Your Inquiries

SHIPMENTS VIA C. & N. W.—C., M. & ST. P.—W. & M.

"Chief Brand" Maple and Beech Flooring

in 3/4, 1 and 1 1/2 inch Maple in all standard widths and grades, will commend itself to you and your trade on its merits alone

WRITE US, WE CAN INTEREST YOU

Kerry & Hanson Flooring Co.

GRAYLING, MICHIGAN

We Offer:

About 500M No. 3 Maple.

About 450M No. 2 Common and Better Birch.

About 800M No. 2 Common and Better Basswood.

To be cut during 1913

**LATH
SHINGLES**

**MICHIGAN
HARDWOODS**

**PINE AND
HEMLOCK**

East Jordan Lumber Co.

East Jordan, Michigan

MAKERS OF IMPERIAL MAPLE FLOORING

**Michigan
Hard Maple
Firsts and
Seconds**

Stock now in our
Detroit yard for
quick shipment.

150 M'	5/4	
45 M'	8/4	
25 M'	10/4	
60 M'	12/4	
40 M'	16/4	
20 M'	5/4	14" and wider
10 M'	6/4	12" and wider
10 M'	10/4	12" and wider
12 M'	12/4	12" and wider
10 M'	16/4	12" and wider

PRICES REASONABLE, AND GRADES CORRECT

Thomas Forman Company

Detroit

S. L. EASTMAN FLOORING CO.

SAGINAW BRAND

MAPLE FLOORING

SAGINAW, MICH.

For Prompt Shipment

Basswood—100,000 ft. 5/4 No. 2 Common & Better.

Soft Maple—25,000 ft. 4/4 & 8/4 Log Run M. C. O.

White & Red Oak—12,000 ft. Log Run M. C. O.

Black Walnut—3,000 ft. Log Run M. C. O.

STRUTHERS COOPERAGE CO., Romeo, Michigan

C If you are not a subscriber to **HARDWOOD RECORD** and have a suspicion that you would like to see a copy, it is yours for the asking.

VENEERS AND PANELS

Hoffman Brothers Company

Sliced and Sawed, Quartered
and Plain Red and
White Oak

Walnut Cherry Ash Maple

Let us Send You Our Stock List FORT WAYNE, IND.

B. C. JARRELL & CO.

MANUFACTURERS OF

Rotary-Cut Gum and Poplar
VENEERS

Well manufactured, thoroughly
KILN DRIED and FLAT

HUMBOLDT, - TENNESSEE

CIRCIASSIAN MAHOGANY

Logs **VENEERS** Lumber

WE IMPORT WE MANUFACTURE

All Thicknesses of Mahogany
Ready for Shipment

RICE VENEER & LUMBER CO.
GRAND RAPIDS, MICH.

OHIO VENEER COMPANY

OFFICE AND MILLS:

**2624-2634 Colerain Avenue
CINCINNATI OHIO**

WE OFFER THE FOLLOWING
VENEER FOR SALE:

600,000 ft. 1/28" Cut Circassian Walnut Veneer
1,500,000 ft. 1/28" Slice Cut Figured African Mahogany
Veneer
100,000 ft. 1/24" Slice Cut Figured African Mahogany
Veneer
125,000 ft. 1/20" Sawed Mexican Mahogany Veneer
200,000 ft. 1/20" Sawed Quartered White Oak Veneer
280,000 ft. 1/20" Slice Cut Quartered White Oak
Veneer
150,000 ft. 1/28" Slice Cut Quartered White Oak
Veneer
350,000 ft. 1/28" Slice Cut Figured Gum Veneer
50,000 ft. 1/28" Slice Cut Quartered Sycamore
600,000 ft. Slice Cut African Mahogany Crotch Veneer
70,000 ft. Cut Bird-Eye Maple Veneer

KANSAS CITY, MO.

HELENA, ARK.

VENEERS

PENROD WALNUT & VENEER COMPANY

General Offices, KANSAS CITY, MO.



For items of Hardwood Stock or Hardwood
Machinery, you will find it advantageous to
write our advertisers. Get in touch!

KENTUCKY VENEER WORKS

ROTARY CUT
GUM, POPLAR, OAK

SAWED AND SLICED
QUARTERED OAK, MAHOGANY

LOUISVILLE, KENTUCKY

Adams & Raymond Veneer Co.

INDIANAPOLIS, INDIANA

MANUFACTURERS

OF
PLAIN & FIGURED
VENEERS

CIRCIASSIAN } WALNUT
AMERICAN }

QUARTERED OAK

ANY
WOOD
THICKNESS

ANY
THICKNESS

VENEERS AND PANELS

Ahnapee Veneer & Seating Co.

HOME OFFICE, FACTORY AND VENEER MILL, ALGOMA, WIS.

VENEER AND SAWMILL, BIRCHWOOD, WIS.

We manufacture at our Birchwood plant single ply veneers of all native northern woods and deliver stock that is in shape to glue.

From our Algoma factory, where we have specialized for twenty years, we produce panels of all sizes, flat or bent to shape, in all woods, notably in Mahogany and Quarter-Sawn Oak.

We make no two-ply stock, and do not employ sliced cut quartered oak. Our quartered oak panels are all from sawed veneer.

Every pound of glue we use is guaranteed hide stock. We do not use retainers. Our gluing forms are put under powerful screws and left until the glue has thoroughly set.

If you seek a guaranteed product that is the best, based on results accomplished by most painstaking attention and study of every detail, combined with the use of the best stock and an up-to-date equipment, our product will appeal to you.

If you are a "price buyer" we probably cannot interest you.

KIEL WOODEN WARE CO.

WHEN IN THE MARKET FOR ROTARY CUT

BIRCH
BASSWOOD
OAK
ASH
ELM

VENEER

Write Us

WISCONSIN

KIEL
FACTORY AND MAIN
OFFICE

MELLEN
VENEER AND HEADING
MILL

MUST MOVE BY JAN. 1

EXTRA!

EXTRA!

Panels—3 ply—good 1 side

3/16 Ash, 24x60 1/4 Ash, 24x60 1/4 Basswood, 24x60
30x60 30x72

IN STOCK AT CHICAGO WAREHOUSE, 1140 WEST LAKE STREET
TELEPHONE HAYMARKET 3027

Wisconsin Seating Co.

New London, Wis.

HOWARD HANSON, President

THOMAS A. TURNER, Secy. and Treas.

THE HANSON-TURNER COMPANY

MANUFACTURERS OF

ROTARY CUT VENEER AND THIN LUMBER

ELM
BEECH
CURLY BIRCH

OAK
MAPLE

BIRCH
BASSWOOD
BIRD'S-EYE MAPLE

SPECIALTIES:

DRAWER BOTTOMS BACK PANELS CENTER STOCK
BACKING PIANO PIN BLOCKS BIRCH DOOR STOCK
CURLY BIRCH BIRD'S-EYE MAPLE

OFFICE and FACTORY at WELLS, N. Y.

VENEERS AND PANELS

OUR SPECIALTY

Highly Figured Quarter-Sawed White Oak Veneer



**PUTNAM VENEER & LUMBER CO.
ROACHDALE, IND.**

H. I. CUTSINGER, Gen'l Mgr.

Custom Mill Work, Storage, Inspection

ON

Foreign Fancy Woods, Mahogany, Cedar, Circassian

We receive the logs, store or warehouse them, manufacture them into lumber, cut or saw veneers, pile and store the product, and ship via any railroad. Also furnish inspection returns on logs or lumber. Can furnish accommodations and economies which it is impossible to secure elsewhere. We always have on our yards parcels of plain and figured African, Mexican and Cuban Mahogany, Circassian Walnut and Cedar logs, placed here for sale by direct foreign shippers, from which advantageous purchases can be made.

Astoria Veneer Mills & Dock Co.

Long Island City, New York

Veneers and Panels with a Reputation

WE manufacture Veneers in all the native woods and for all purposes. Also Built-up Panels in native and foreign woods—three and five-ply—and have established a reputation for furnishing high-grade material. Send us your inquiries and orders and become one of our satisfied customers.

Underwood Veneer Co.

Wausau, Wis.

“SOVEMANCO.”

We can furnish anything you want in

Sawed and Sliced Foreign and Domestic Figured Veneers

Capacity 15 million feet per year. Ready to take care of carload orders promptly. Small orders shipped same day received, if desired.

SOUTHERN VENEER MFG. CO., Inc.

Office, 21st and Standard.

LOUISVILLE, KY.

Mills, Magnolia, Standard and 21st Sts.

THE SOUTH

PROMINENT SOUTHERN MANUFACTURERS

ANY REASONABLE OFFER

WILL BUY THE FOLLOWING STOCK: DRY—IN FINE CONDITION

6,000 ft. 3/4" 1s-2s Qrtd. White Oak, 6" & up.	5,000 ft. 5/4" No. 2 Com. Qrtd. White Oak.	20,000 ft. 6/4" 1s-2s Qrtd. Red Oak, 6" & up.
8,500 ft. 3/4" No. 1 Com. Qrtd. White Oak, 6" & 7".	5,700 ft. 2 1/4" Com. & Bet. Plain White Oak.	15,000 ft. 8/4" 1s-2s Qrtd. Red Oak, 6" & up. Very wide run.
5,000 ft. 6/4" No. 1 Com. Qrtd. White Oak.	35,000 ft. 4/4" No. 2 Com. Red & White Oak.	17,000 ft. 4/4" 1s-2s Qrtd. Poplar.
2,700 ft. 5/8" No. 2 Com. Qrtd. White Oak.	40,000 ft. 4/4" 1s-2s Qrtd. Red Oak, 6" & up.	7,500 ft. 4/4" 1s-2s Yel. Poplar, 7" & up wide.
35,000 ft. 4/4" No. 2 Com. Qrtd. White Oak.	15,000 ft. 5/4" 1s-2s Qrtd. Red Oak, 6" & up.	13,000 ft. 5/4" Com. & Bet. Poplar, 13" & up.
		26,000 ft. 6/4" Clear Saps. Good widths and lengths.
		38,000 ft. 6/4" No. 1 Common. Good widths and lengths.

We, of course, have a complete stock of Quartered and Plain Oak, Poplar and Hickory, etc., in all grades and thicknesses; and will be glad to have your inquiries for anything you may need.

J. V. STIMSON & CO.

OWENSBORO, KY.

The Central Veneer Co.

**SOFT YELLOW POPLAR
CROSS BANDING**

Huntington, West Virginia

WE MANUFACTURE AND
DEAL IN

TIES, HARDWOOD LUMBER AND TIMBER

We want to buy a large
amount of 4/4, 8'—8'6"
Oak from Tie Sides

Hill Bros. Tie & Lumber Company
Charleston, W. Va.

Louisiana Long Leaf Lumber Co.

Fisher, Louisiana

Diamond



Brand

OAK FLOORING
A GUARANTEE OF PERFECTION

PUT US ON YOUR GUM MAP

In the next ninety days, our mills
will cut about 3,000,000 feet

RED and SAP GUM

H. H. HITT LUMBER COMPANY

MANUFACTURERS

TENNESSEE VALLEY HARDWOODS
DECATUR, ALABAMA

Boice Lumber Co., Inc.

Southern Hardwoods

MAIN OFFICE
RICHMOND, VIRGINIA

Yards: NORFOLK, ABINGDON, GRAHAM, VA.,
and NORTH WILKESBORO, N. C.



THE SOUTH

PROMINENT SOUTHERN MANUFACTURERS

Frank Purcell Kansas City
U. S. A.

Exporter of **Black Walnut Logs**



**FIGURED WALNUT IN LONG WOOD
AND STUMPS**

**Himmelberger-Harrison
Lumber Co.**

**Specialists
Red Gum**

Mills at
Morehouse, Mo.

Sales Offices
Cape Girardeau, Mo.

William S. Whiting

MANUFACTURER AND WHOLESALE

WHITE PINE

BASSWOOD

BIRCH

BUCKEYE

CHESTNUT

MAPLE

POPLAR

OAK

ASHEVILLE, N. C.

Salt Lick Lumber Co.

SALT LICK

KENTUCKY

MANUFACTURERS OF



Oak Flooring

Complete stock of $\frac{3}{8}$ " and $\frac{13}{16}$ " in all
standard widths

WE HAVE IT

W. W. DEMPSEY

Manufacturer and
Wholesaler of

HARDWOODS

BAND SAWED STOCK

A LINE BRINGS PRICE BY RETURN MAIL

General Offices

Johnstown, Pa.

New York Office

No. 18 Broadway

A FEW ITEMS OF DRY STOCK

We Want to Move

2 cars 4/4 1st & 2nds Cypress.	10 cars 4/4 1sts & 2nds Red Gum.
2 cars 4/4 select Cypress.	2 cars 5/4 No. 1 Common Ash.
4 cars 4/4 No. 1 Shop Cypress.	2 cars 4/4 1sts & 2nds Ash.
1 car 2" 1sts & 2nds Cypress.	1 car 2" 1sts & 2nds Ash.
1 car 2" Select Cypress.	2 cars 4/4 1st & wider Panel
1 car 4/4 1sts & 2nds Cotton-	Cottonwood.
wood.	8/4 to 16/4 No. 1 Common and
5 cars 3" mixed oak Crossing	better Plain Red and White
Plank.	Oak.

BAKER-MATTHEWS MFG. CO.

SIKESTON, MO.

WRITE US FOR PRICES

"WE ARE GETTING RESULTS"

WRITES ONE ADVERTISER

This Means That He Is Getting

NEW BUSINESS

Through His Ad

If we can do it for him is there any logical
reason why we can't for you?

MAKE US PROVE IT

HARDWOOD RECORD, CHICAGO

GARETSON-GREASON LUMBER CO.

1002-1005 Times Bldg.

ST. LOUIS

MANUFACTURERS

Three Mills



WISCONSIN



WHERE THE FINEST NORTHERN HARDWOODS GROW

WE MANUFACTURE MICHIGAN
HARDWOODS AND HEMLOCK.
MILLS ELECTRICALLY
DRIVEN; STOCK
BAND SAWN

Have in Shipping Condition

BIRCH: NO. 2 AND BETTER, 4/4 to 12/4
ASH: NO. 2 AND BETTER, 4/4 to 12/4
ELM: NO. 2 AND BETTER, 4/4 to 12/4
BASSWOOD: NO. 2 AND BETTER, 4/4
to 12/4

WE are well equipped for manufacturing
special sizes, wagon stock, skids, ties, etc.

THE C. A. GOODYEAR LUMBER COMPANY
Office and Mill Logging Camp
TOMAH, WISCONSIN BLUE BILL, MICHIGAN

How About Birch?

Are your stocks complete?

*We can furnish Dry Birch
in all thicknesses, all grades*

LET US QUOTE YOU PRICES

OELHAFEN LUMBER CO.
TOMAHAWK, WISCONSIN

GET OUR PRICES ON

1 car 1" No. 1 Common & Btr. Red Birch.
10 cars 1" No. 2 Common & Btr. Plain Birch.
5 cars 1" No. 1 and No. 2 Common Plain Birch.
2 cars 1 1/4" No. 2 Common & Btr. Plain Birch.
2 cars 1 1/2" No. 2 Common Plain Birch.

Can ship in straight or
mixed cars with other lumber

ROBBINS LUMBER COMPANY
Rhineland, Wisconsin

SAWYER GOODMAN CO.

MARINETTE, WIS.

Mixed Cars of Hardwood, Bass-
wood, White Pine and Hemlock,
Cedar Shingles and Posts

We make a specialty of White Pine Beveled Siding and
White Pine Finish and Shop and Pattern Lumber

HARDWOOD RECORD is a differ-
ent kind, and altogether better
lumber newspaper than has hither-
to been published. This is made possible
by the loyal co-operation and support of the
hardwood element of the lumber industry.
If you are a subscriber you will agree.

IF YOU HAVEN'T SEEN THE GIBSON TALLY BOOK

Let us send you one on approval, with samples of Tally
Tickets for triplicate, duplicate or single tallies—a score
of forms to choose from. They are the latest and best. En-
dorsed by hundreds of lumber manufacturers and buyers.

HARDWOOD RECORD

CHICAGO

BUFFALO

The Foremost Hardwood Market of the East

I. N. Stewart & Bro.

Specialties

Cherry and Oak

892 Elk Street

Standard Hardwood Lumber Co.

**OAK, ASH and
CHESTNUT**

1075 Clinton Street

BUFFALO HARDWOOD LUMBER CO.

We want to buy for cash

OAK, ASH AND OTHER HARDWOODS

*All grades and thicknesses.
Will receive and inspect stock at shipping point.
Branch yard, Memphis, Tenn.*

940 Seneca Street,

BUFFALO

T. SULLIVAN & CO.

SPECIALTIES:

Gray Elm, Brown Ash

Pacific Coast Fir and Spruce

2 ARTHUR STREET

ORSON E. YEAGER

SPECIALTIES:

Oak, Ash and Poplar

932 ELK STREET

ANTHONY MILLER

**HARDWOODS
OF ALL KINDS**

893 EAGLE STREET

G. ELIAS & BRO.

HARDWOODS

*White Pine, Yellow Pine, Spruce,
Hemlock, Fir, Lumber, Timber, Mill-
work, Boxes, Maple and Oak Flooring*

955-1015 ELK STREET

Hugh McLean Lumber Co.

OUR SPECIALTY:

**QUARTERED
WHITE OAK**

940 ELK STREET

The above firms carry large and well assorted stocks of all kinds and grades of Hardwoods, and have every facility for filling and shipping orders promptly. They will be pleased to have your inquiries.

Vansant,

Manufacturers Old-Fashioned

5-8 and 4-4
in Wide Stock,
Specialty

Kitchen &

Soft
Yellow
Poplar

Company

Ashland, Kentucky

EASTERN REPRESENTATIVE, John L. Cochran
601 W. 115th Street, New York City

CHICAGO OFFICE, Steger Building
W. H. Matthias, Manager.

YOU pay a *little* more for our hardwood lumber than you do for many others', but it's worth *much* more.

With our modern and first-class equipment and expert operatives, we couldn't make bad lumber if we tried to, because the *quality* and *size* of our virgin tough mountain white ash, red birch, yellow poplar, buckeye, maple, red oak, cherry and basswood, averaging less than three logs to the thousand, and 95 per cent sixteen feet, is the best type of hardwood timber growth in the United States, and shows a larger percentage of *firsts*.

If you are a discriminating buyer, let's get acquainted.

LITTLE RIVER LUMBER COMPANY

Townsend, Tenn.

W. H. White Company Boyne City Lumber Company

Mills and General Office: BOYNE CITY, MICH.

Sales Office: BUFFALO, N. Y.

STOCK DRY—STANDARD GRADES—BEST
MANUFACTURE—CAR OR CARGO SHIPMENTS

WE OFFER

4/4 and 5/4 No. 2 common and better
Basswood

4/4 No. 2 common and better Brown
Ash

4/4 and 5/4 No. 2 common and better
Birch, strictly unselected for color

4/4 and 5/4 No. 1 and No. 2 common
Flooring Maple.

4/4, 5/4, 6/4, 8/4, 10/4, 12/4 and 16/4
Firsts and Seconds Maple

YELLOW POPLAR

MANUFACTURERS OF BAND SAWED

POPLAR
QUARTERED OAK
PLAIN OAK
CHESTNUT
BASSWOOD



SPECIALTY
QUARTER SAWED
WHITE OAK

Coal Grove, Ohio, U. S. A.

LUMBER CO.

Aardwood Record

Eighteenth Year,
Semi-Monthly.

CHICAGO, FEBRUARY 10, 1913

(Subscription \$2.
Single Copies, 10 Cents.)



On the Foundation of Today's Good-Will

we are building the structure of tomorrow's bigger business.
Our aim is to make the "McIlvain Service" a source of continual satisfaction to our customers.

An important feature of this "McIlvain Service" is our Stock List—may we send it to you? A postal will do.

J. GIBSON McILVAIN & Co.
1420 Chestnut Street **Philadelphia, Pa.**

HOLLOWAY HARDWOODS

*The following Yellow Cottonwood
is band-sawn and runs*

60% 14' and 16'

COTTONWOOD

176,850 feet 4/4 1st & 2nd 6" to 12".

89,432 feet 4/4 1st & 2nd 13" & wider.

163,421 feet 4/4 No. 1 Common, containing all the wide.

Holloway Hardwood Lumber Co.
20 W. Jackson Blvd. Chicago

ELEPHANT RUBBER BELTING

AIR DRILL AND AIR TOOL

HOSE

STEAM
WATER
SUCTION

EXTRA QUALITY

Recommended for hard service
and guaranteed to do the work



SELLING AGENTS

CRANE COMPANY - ALL BRANCHES
STANDARD EQUIPMENT CO., MOBILE, ALA
ALBANY MILL SUPPLY CO., ALBANY, GA.

**THE MECHANICAL
RUBBER COMPANY**

(Chicago Rubber Works)

**307 W. Randolph Street,
ESTABLISHED 1882**

CHICAGO

MICHIGAN

FAMOUS FOR HARD MAPLE AND GREY ELM

Michigan Hardwoods

MANUFACTURED BY

COBBS & MITCHELL, Inc.

CADILLAC, MICH.

January 13th, 1913

DRY STOCK LIST

4/4 Basswood No. 1 Common.....	75 M
4/4 Birch 1s & 2s Red Curly and Wavy.....	12 M
4/4 Cherry No. 3 Common & Better.....	9 M
4/4 Cadillac Gray Elm No. 1 Common.....	100 M

"It is not what lumber costs you, so much as what you can get out of it, that decides its value for your work."

OUR OWN MANUFACTURE

W. D. YOUNG & CO.

MANUFACTURERS

FINEST MAPLE FLOORING

KILN DRIED, HOLLOW BACKED
MATCHED OR JOINTED
POLISHED AND BUNDLED

Hard Maple, Beech and Birch Lumber

1 TO 6 INCHES THICK

WRITE FOR PRICES

BAY CITY, MICHIGAN

Something New For Your Factory Floors

Utility Joined With Economy

We are now manufacturing what we call a No. 2 Factory grade of Hardwood Flooring which can be used successfully in factory buildings where good wearing qualities rather than appearance are required. This Flooring is made from the hardest portion of the log, and while the Flooring shows the heart defect to a considerable extent, nevertheless it will wear with wonderful durability. It is "Rockhard" flooring at a rock bottom price.

It is 13/16 x 2 1/4" face, and the Flooring is kiln dried, hollow backed, bored, end matched, steel scraped and bundled.

Write us about it. This is a grade of Hardwood Flooring you should know about. Address MITCHELL BROTHERS COMPANY, Sales Department, CADILLAC, MICHIGAN.

THE Kneeland-Bigelow Co.

300,000 Feet

5 4 No. 2 Common and Better Beech

500,000 Feet

6/4 No. 2 Common and Better Beech

HARDWOOD MANUFACTURERS

250,000 ft. 5/4 No. 1 Common Basswood

This is of good average widths and lengths, containing a large percentage of 16 ft.

All of the above stock is nicely manufactured, being hand sawed, trimmed, and well seasoned. We are prepared to quote attractive prices for this material for immediate shipment.

BAY CITY, MICH.

CHICAGO

THE GREATEST HARDWOOD MARKET IN THE WORLD

FLANNER-STEGER LAND & LUMBER CO. MAPLE AND BIRCH FLOORING

of unexcelled manufacture and quality. Also Manufacturers of Basswood, Birch, Elm, Maple and Hemlock.

SEND US YOUR INQUIRIES

MILLS:
BLACKWELL, WISCONSIN

GENERAL SALES OFFICE
1704 STEGER BLDG., CHICAGO, ILL.

J. RAYNER VENEERED PANELS

ALL WOODS
SEND FOR STOCK LIST

MAHOGANY LUMBER

CARROLL AVE. AND SHELDON ST.
CHICAGO

HUDDLESTON-MARSH LUMBER COMPANY

(Successors in Chicago to OTIS MANUFACTURING CO.)

2254 LUMBER STREET, CHICAGO

Mahogany Lumber

Mexican and Cuban. 1s
& 2s, No. 1 Com., Shorts.
All thicknesses. Plain and
Figured.

Mahogany Veneer

Mexican and African.
Sawed and sliced. All
thicknesses. Figured and
Plain.

Circassian Walnut Lumber and Veneer.

Qtd. R. & W. Oak Veneer Plain R. & W. Oak Veneer
BIRCH, GUM, POPLAR, AND BASSWOOD VENEER

ALL IN OUR CHICAGO YARD.
PROMPT SHIPMENT ASSURED.

We Have Made a Success
of the Veneer Business—

Why?

Because no permanent money-making
proposition can be one-sided and we
are benefiting our customers

Let us have your inquiries when in the market
for the following woods:

MAHOGANY	YELLOW POPLAR
CIRCISSIAN	PINE
CURLY BIRCH	R.C. Red & Wh. Oak
WALNUT BUTTS	R. C. Birch

And QUARTERED OAK, Sawed and Sliced

Veneer Manufacturers Company
Fulton and May Streets, Chicago, Ill.

Estabrook-Skeeel Lumber Co.

MANUFACTURERS AND DEALERS IN

Maple, Birch, Elm, Basswood, Ash
And Other Northern Hardwoods

In the Market for Round Lots of Hardwood

WRITE US BEFORE SELLING

Fisher Building, - - - CHICAGO

'PHONE HARRISON 1984



A floor to adore

For thirty-three years Wilce's Hardwood Floor-
ing has been among the foremost on the market
and because it stands today "unequaled" is the
best evidence that its manufacturer has kept
abreast of modern methods and the advanced de-
mands of the trade. To convince yourself of the
above statements, try our polished surface floor-
ing, tongued and grooved, hollow backed, with
matched ends and holes for blind nailing—you'll
find it reduces the expense of laying and polishing.

Our Booklet tells all about Hardwood Flooring
and how to care for it—also prices—and is free.

The T. Wilce Company

22nd and Throop Sts. CHICAGO, ILL.

You Ought to Be Advertising to Us

You buyers of hardwood lumber—the rank and file, at any rate—are doing more real work to get what you want than for some time; possibly it's because not so much dry, usable lumber is being offered as previously.

For that reason we might just discontinue advertising to you, and wait for your advertising, in the form of inquiries, to come to us. But we want you to remember, at this time when people are really looking for lumber, instead of salesman looking for consumers with the traditional microscope, that Louisville Hardwood Club service is just as valuable as ever, and probably a bit more so.

As we have pointed out before, when an item is scarce, it is pretty hard to find one concern, no matter how large, that can provide it in quantity. But where the joint resources of many, all of them big and well equipped to take care of the regular business of the trade, are available in filling a single order, it is certain that the business can be handled to the thorough satisfaction of the customer.

Think this over; and if you have been having trouble getting that car of thick plain oak, or good ash, or wide poplar, or whatever it happens to be, just dictate a letter to

The Louisville Hardwood Club

OHIO RIVER SAWMILL COMPANY
W. P. BROWN & SONS LUMBER COMPANY
THE LOUISVILLE VENEER MILLS
NORMAN LUMBER COMPANY
(Mill at Holly Ridge, La.)

EDWARD L. DAVIS LUMBER COMPANY
LOUISVILLE POINT LUMBER COMPANY
C. C. MENGEL & BRO. CO.
BOOKER-CECIL COMPANY

KNOXVILLE

Famous for Finest Type of Poplar, Oak and Chestnut

VESTAL LUMBER AND MANUFACTURING CO. KNOXVILLE, TENNESSEE.

QUARTERED WHITE OAK OUR SPECIALTY

MANUFACTURERS OF
QUARTERED WHITE OAK, PLAIN OAK, POPLAR, WALNUT & TENNESSEE RED CEDAR LUMBER
BAND MILLS AT VESTAL, A SUBURB OF KNOXVILLE. SOUTHERN AND LOUISVILLE & NASHVILLE RAILROAD

H. S. MIZNER,
Pres.

C. C. CANNON,
Vice-Pres.

J. M. LOGAN,
Gen'l Manager

G. R. SWANN,
Sec'y and Treas.

J. M. LOGAN LUMBER CO.

MANUFACTURERS AND WHOLESALERS
HARDWOODS AND PINE
POPLAR A SPECIALTY

Main Office and Yards: Knoxville

Branch Office and Yard:

Bank and McLean Ave., Cincinnati I. M. ASHER, Mgr.

We Want Orders for the following Dry Stock:
WHITE OAK—Plain or Quartered.

RED OAK—Plain or Quartered.

CHESTNUT BASSWOOD
POPLAR WHITE PINE

Always carry large well
assorted stock of all
kinds of Hardwoods.

CAN SHIP ON SHORT NOTICE.

Maphet & Shea Lumber Co.

Manufacturers and Wholesalers

OFFICE: 703-705 HENSON BUILDING

Yard: Middlebrook Pike and
Lonsdale Car Line

KNOXVILLE, TENN.

WE WANT TO MOVE

3 cars 4/4 No. 1 Common Poplar, 7" & up
2 cars 4/4 Clear Sap Poplar, 7" & up
1 car 4/4 Select Poplar, 7" & up
1 car 4/4 1 & 2 Red Oak, 10" & up
1 car 4/4 1 & 2 Chestnut
1 car 4/4 No. 1 Common Chestnut

We manufacture: YELLOW POPLAR,
OAK, CHESTNUT, WHITE AND YEL-
LOW PINE, HEMLOCK BARK, ETC.

BAND AND CIRCULAR MILLS—EAST TENN.
MOUNTAIN VIRGIN HARDWOOD STUMPAGE

"THE VERY BEST" Red Birch

Knoxville Veneer Co.

P. B. RAYMOND, General Manager, Knoxville, Tenn.

Kimball & Kopcke Knoxville, Tennessee

Manufacturers and Shippers of

Appalachian Hardwoods OAK OUR SPECIALTY



CHARLESTON, W. VA.

2 cars 6/4" Common & Better
Chestnut.

2 cars 4/4" 1sts & 2nds Cypress.

5 cars 4/4" 1sts & 2nds Red Gum.

5 cars 4/4" No. 1 Common Red Gum.

5 cars 4/4" 1sts & 2nds Sap Gum.



NASHVILLE



CELEBRATED FOR HIGHEST TYPE TIMBER GROWTH, FAULTLESS MANUFACTURE AND GOOD GRADES

Tennessee Hardwoods

**Tennessee Hardwood
Lumber Co.**

West Nashville

Cherokee Lumber Co.

Manufacturers of all the lumber we sell.
Let us quote you some attractive prices
on quartered white oak and poplar.
Any grades and thicknesses.

NASHVILLE, TENN.

We will name very attractive
prices on a few cars of each of the
following items:

4/4, 6/4, 10/4 and 12/4 1s and 2s Poplar.
4/4 and 8/4 Sap Poplar.
1 1/4", 1 1/2" and 2 1/2" No. 1 Common Poplar.
4/4 No. 1 and Panel Poplar in widths of 12 to 17", 18 to 23"
and 24" and up.
4/4 x 13 to 17" Poplar Box Boards.
4/4 1s & 2s Basswood or Linn—very fine.
3/8, 4/4, 5/4, 10/4 and 12/4 1s & 2s Qtd. W. Oak.
4/4, 5/4, 6/4 and 8/4 No. 1 Common Qtd. W. Oak.
6/4 1s & 2s Qtd. R. Oak.
4/4, 5/4 and 6/4 No. 1 Common Qtd. R. Oak.
6/4 and 10/4 1s & 2s Hickory.
4/4, 6/4, 10/4 and 12/4 No. 1 Common Hickory.
4/4, 6/4, 8/4, 10/4 and 12/4 No. 2 Common Hickory.
4/4 1s & 2s Chestnut, also 5, 6 and 8/4.
4/4 No. 1 Common Chestnut.

John B. Ransom & Co.

MANUFACTURERS OF

Hardwood Lumber

Nashville, Tenn.

Paepcke Leicht Lumber Company

CHICAGO

Southern Hardwoods

¶ We offer stock, produced by our band mills, from our own timber.

¶ We control absolutely the manufacture, piling, grading and shipping of our product and are thus able to assure our trade of uniformity of grades and manufacture.

SPECIALTIES:

RED GUM
SAP GUM

RED OAK
WHITE OAK

COTTONWOOD
YELLOW CYPRESS

SOFT ELM
WHITE ASH

Paepcke Leicht Lumber Company

CHICAGO

LAMB-FISH LUMBER CO.



Band Mill and General Offices

CHARLESTON, MISS.

THE LARGEST HARDWOOD MILL IN THE WORLD
ANNUAL CAPACITY, 40,000,000

STOCK LIST—Dry Lumber on Hand February 1, 1913

TELEGRAPH
CODES
UNIVERSAL
HARDWOOD.
WESTERN UNION
Cable Address, Lamb

	3/8	1/2	5/8	3/4	4/4	5/4	6/4	8/4	10/4	12/4	16/4
FAS. Qtrd. White Oak.....	6,000	50,000	20,000			25,000	7,000				
No. 1 Com. Q. W. Oak.....				20,000	150,000						
No. 2 Com. Q. W. Oak.....					15,000						
FAS. Q. W. Oak, 10" and up.....					15,000						
FAS. P. W. Oak.....	30,000	30,000	20,000			40,000	40,000		3,000		4,000
No. 1 Com. P. W. Oak.....			40,000	16,000	200,000	5,000	20,000		9,000		
FAS. P. W. Oak, 12" and up.....				4,000							
FAS. P. R. Oak.....			30,000		180,000			20,000			1,000
No. 1 Com. P. R. Oak.....			20,000	25,000	60,000		18,000	1,000			
C. & B. Qtrd. Red Gum.....					50,000	5,000					
FAS. Circassian Red Gum.....				15,000	15,000	2,000	3,000	1,000			
FAS. Red Gum, Plain.....	200,000	150,000	110,000	250,000	210,000	40,000	60,000	40,000		3,000	
No. 1 Com. Red Gum, Plain.....	60,000	20,000	130,000	40,000	50,000	50,000	20,000				
FAS. Sap Gum, 18" up.....					15,000						
FAS. Sap Gum, 6" up.....	30,000	50,000	40,000	50,000		15,000	20,000	15,000			
No. 1 Com. Sap Gum.....			25,000	30,000	250,000		15,000				
No. 2 Com. Gum.....	60,000	30,000	25,000	40,000		220,000	15,000				
S. & B. Cypress.....					45,000		75,000	30,000			
C. & B. Tupelo.....					60,000						
Log Run Elm.....					70,000						

OUR LUMBER CONTAINS ALL WIDE STOCK PRODUCED IN MANUFACTURING AND WILL RUN OVER 50% OF 14 AND 16 FT. LENGTHS. WE ALSO MANUFACTURE OAK TIMBERS AND BRIDGE PLANK—FACILITIES FOR KILN DRYING AND DRESSING

"STEARNS" QUALITY LUDINGTON

HARDWOOD SPECIALISTS

We Specialize in

MIXED CARLOAD ORDERS

of

Maple, Beech, Birch, Basswood, Elm and Ash
and our specialty is

PROMPT SERVICE

Try us when you want it quick

The **STEARNS**
SALT & LUMBER CO. LUDINGTON, MICH.

BAND SAWN HARDWOODS

WE PRODUCE OUR OWN STOCKS

OAK—Plain and Quartered, Red and White

COTTONWOOD—Ash, Southern Elm, Gum, Soft Maple

A FEW ITEMS WE WANT TO MOVE:

- 100,000 ft. 4/4" x 18" to 21" 1st & 2nds Cottonwood.
- 50,000 ft. 5/4" x 13" to 17" 1st & 2nds Cottonwood.
- 100,000 ft. 4/4" x 9" to 12" Cottonwood Box Boards.
- 200,000 ft. 4/4" x 13" to 17" Cottonwood Box Boards.
- 100,000 ft. 4/4" 1st & 2nds Red Gum.
- 100,000 ft. 5/8" 1st & 2nds Sap Gum.

WRITE US FOR PRICES

ANDERSON-TULLY COMPANY
HARDWOOD LUMBER **Memphis, Tenn.**

500 Copies Sold Within a Week After Prospectus Was Issued

Hardwood Record announces the issue on March 1, 1913, of an Authoritative Commercial and Scientific Book

American Forest Trees

By Henry H. Gibson, Editor Hardwood Record
Edited by Hu Maxwell, Wood Utilization Expert

The Work Involves:

First: A botanical description of the more than 300 species of American forest tree growth.

Second: A physical description of the wood of these species.

Third: A recital of the chief uses of all important American woods, together with suggestions of advantageously broadening their uses.

Fourth: Complete information concerning the range of growth of all varieties.

Fifth: Related trees are logically grouped according to families and spe-

cies; important species covered in substantial detail, and brief mention of the woods of minor importance.

Sixth: Scientific name of each tree is recited, as well as the various common names by which it is recognized in different parts of its range of growth.

Seventh: The properties of the various woods are carefully analyzed, particularly weight, hardness, stiffness, strength, elasticity, toughness, color, figure, and seasoning and lasting properties.

¶ The book will contain between 650 and 750 pages, will be printed on the best quality of enameled paper, and handsomely bound in half leather, dark green roan back and corners, with basket cloth sides, silk head-bands, gold stamping on the back, and gilt top.

¶ The work will be illustrated with more than 100 full-page pictures on plate paper in sepia, outlined in orange, from photographs, covering all the chief commercial varieties of virgin forest timber growing in the United States; and also with numerous engravings, from drawings and photographs, showing leaf and flower forms, etc.

¶ The price of the work is \$6.00, delivered by express or mail, and is sold only on subscription.

¶ An order blank, and a prospectus, showing the character of the paper, size of page and style of printing will be forwarded on application.

Address Book Department, HARDWOOD RECORD

537 South Dearborn Street

Chicago, Illinois

ORDERS SHOULD BE PLACED AT ONCE

CINCINNATI

THE GATEWAY OF THE SOUTH

L. W. RADINA & CO.

DEALERS IN

POPLAR AND HARDWOODS

CINCINNATI : : OHIO

WE WANT TO BUY

1", 1 1/4", 1 1/2" 1s & 2s AND NO. 1 COMMON SAP GUM
1", 1 1/2" & 2" 1s & 2s AND NO. 1 COMMON RED GUM
1" NO. 1 COMMON TUPELO.

SUBMIT US YOUR STOCK SHEETS
WITH BEST CASH PRICES

DUHLMEIER BROS.

CINCINNATI, OHIO

W. E. HEYSER, President WEAVER HASS, V. President
BENJAMIN BRAMLAGE, Sec'y & Treas.

The W. E. Heyser Lumber Company

MAIN OFFICE & YARDS
Winton Place
Cincinnati, Ohio

BRANCH YARDS AND MILLS
West Virginia, Mississippi, Arkansas & Kentucky

12,000,000 ft. High Shipments made
Grade West Vir- direct from our
ginia and Southern own yards and
Hardwoods in mills in straight or
stock at all times. mixed cars.

SEND US YOUR INQUIRIES

BENNETT & WITTE

We are going to move the following lot of
high grade Lumber during the next few weeks

2 cars 4/4" 1 & 2 Red Gum, 18" to 27" wide.	2 cars 4/4" Cottonwood Box Bds., 3" up.
3 cars 4/4" No. 1 Com. Qrtd. Red Oak.	2 cars 4/4" 1 & 2 Poplar.
3 cars 4/4" No. 1 Com. Qrtd. White Oak.	1 car each 12/4" No. 1 Com. Selects & 1 & 2 Poplar.
1 car 12/4" 1 & 2 Plain White Oak.	1 car 4/4", 5/4" & 6/4" 1 & 2 Ash, 12" & up wide.
2 cars 5/8" No. 2 Com. Plain Oak.	1 car 8/4", 10/4", 12/4" & 16/4" 1 & 2 Ash, 12" up wide.

Main Office
CINCINNATI, OHIO

SOUTHERN OFFICE, MEMPHIS, TENN.
EXPORT OFFICE, NEW ORLEANS, LA.

The Mowbray & Robinson Co.

SPECIALISTS IN

OAK—ASH—POPLAR

ALWAYS IN THE MARKET FOR
ROUND LOTS OR MILL CUTS

OFFICE AND YARDS
SIXTH ST., BELOW HARRIET

CINCINNATI

89%

of HARDWOOD RECORD subscribers are owners of steam plants. Eighty-nine per cent are, therefore, buyers of wood-working machinery. There is little percentage of waste circulation in HARDWOOD RECORD for machinery advertisers.

The Maley, Thompson & Moffett Co.

Veneers, Mahogany and Hardwood Lumber

Largest Stocks

Best Selections

CINCINNATI, OHIO

THE EAST

BOSTON

NEW YORK

PHILADELPHIA

WM. WHITMER & SONS

INCORPORATED

Manufacturers and Wholesalers of All Kinds of

"If Anybody Can,
We Can"

HARDWOODS

West Virginia Spruce and Hemlock
Long and Short Leaf Pine Virginia Framing

Franklin Bank Bldg.

PHILADELPHIA

Willson Bros. Lumber Co.

MANUFACTURERS

WEST VIRGINIA HARDWOODS

Oliver Building

PITTSBURG, PA.

W. R. TAYLOR LUMBER CO.

Wholesalers and Manufacturers

CYPRESS, WHITE PINE, HARDWOODS AND HEMLOCK

1829 Land Title Building, PHILADELPHIA, PA.

PALMER & PARKER CO.

TEAK

ENGLISH OAK

CIRCASSIAN WALNUT

MAHOGANY

VENEERS

EBONY

DOMESTIC

HARDWOODS

103 Medford Street, Charlestown Dist.
BOSTON, MASS.

AMERICAN LUMBER & MFG. CO.

Manufacturers and Wholesalers PITTSBURGH, PA.

HARDWOOD White and Yellow Pine

We make a specialty of thick Railroad Car and Construction
White Ash, Hard Maple and Oak timbers, long lengths and
White Oak. special sizes.

Write for prices before heavy call for Spring requirements.

WISTAR, UNDERHILL & NIXON

REAL ESTATE TRUST BUILDING, PHILADELPHIA, PA.

QUARTERED WHITE OAK

NICE FLAKY STUFF

H. D. WIGGIN 89 STATE STREET

BOSTON, MASS.

MANUFACTURER HARDWOOD LUMBER

Circular-sawed Poplar, Oak, Chestnut, Basswood, Maple
Mill at Stone Coal Junction, West VirginiaWe Know How to fill your orders for all kinds of HARD-
WOODS, WHITE PINE, YELLOW PINE,
SPRUCE, HEMLOCK, CYPRESS, HARDWOOD FLOORING.

Give us a trial.

THOMAS E. COALE LUMBER COMPANY

FRANKLIN BANK BUILDING,

PHILADELPHIA, PA.

WHITE OAK } 6x6 to 12x12
BILL TIMBERS } 10 to 20 ft.

ALSO BRIDGE PLANK

J. S. KENT COMPANY PHILADELPHIA

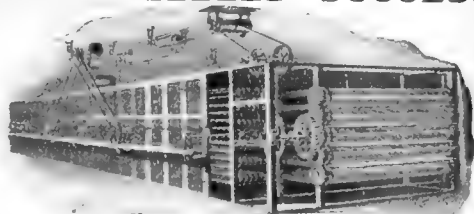
For 2 Cars 4/4 No. 1 Common and Better Chestnut
Quick 1 Car 6/4 No. 1 Common and Better Chestnut
1 Car 8/4 No. 1 Common and Better Chestnut
Shipment 3 Cars 5/4 Sound Wormy Chestnut

Inquiries Promptly Answered

DANIEL B. CURLL,

REAL ESTATE TRUST BLDG., PHILADELPHIA, PENNA.

PROCTOR VENEER DRYER FIREPROOF

—AN—
UNPARALLELED SUCCESSNo
Splitting
Nor
Checking
No
Clogging
Nor
AdjustingRecommended by
all those
who
have tried
itTHE PHILADELPHIA TEXTILE MACHINERY COMPANY
DEPT. L HANCOCK & SOMERSET STS. PHILA. PA.

If You Knew

What our BULLETIN SERVICE was doing
for your competitor in the lumber business, you'd
not only want the service yourself, but YOU'D
HAVE IT.

Let Us Tell You About It.

Hardwood Record :: Chicago

THE EAST

LEADING MANUFACTURERS AND JOBBERS

LET us talk to you about the plain and quartered oak that made Indiana famous. It's the kind we make to-day.

Wood-Mosaic Co., New Albany, Ind.

HARD MAPLE

When the quality of being hard is required in Maple, Vermont or Adirondack stock should be specified. Maple will not grow harder for us than other people, but it certainly does grow harder in this section of the country than elsewhere.

WE CAN MAKE PROMPT SHIPMENTS.

GEO. WEBSTER LUMBER CO.
21 Besse Place, Springfield, Mass.

BEECHER & BARR
OAK CHESTNUT POPLAR
WHITE PINE, YELLOW PINE AND HEMLOCK
INTERIOR TRIM. HARDWOOD FLOORING.
442 LAND TITLE BLDG. PHILADELPHIA, PA.

CHARLES HOLYOKE
141 MILK STREET, BOSTON, MASS.
HARDWOODS

WM. E. LITCHFIELD

MASON BUILDING, BOSTON, MASS.
Specialist in Hardwoods

Manufacturers are requested to supply lists of stock for sale

You can't afford to be without *The Gibson Tally Book*
when it costs but a dollar, if you want the most convenient and accurate system for tallying lumber.
Hardwood Record :: :: Chicago

JONES HARDWOOD COMPANY
33 Broad Street, Boston, Mass.

Birch, Maple and Beech

Saw Mills Designed and Built

Plans and specifications prepared. Construction supervised. First class heavy millwright work. Entire plants surveyed. Machinery for complete mills. Fire loss adjustments. Practical sawmill engineer. Can save you money. Highest testimonials.
C. M. STEINMETZ, P. O. Box 83, Washington, D. C.

Going up—Hardwood Timber

We have the following hardwood and pine timber for sale at prices that have not as yet been advanced with the rise in value on timber lands. For a short time we offer—

150,000,000 FEET HARDWOOD IN SOUTHEAST ARKANSAS — A SPLENDID OPPORTUNITY.

7,600,000 FEET OF HARDWOOD IN SOUTH-WEST ARKANSAS

We also have timber in British Columbia and on the Pacific Coast and Oregon.

For further particulars, address

John C. Spry
Room 1003 Harris Trust Bldg., Chicago, Illinois

R.E. Wood Lumber Company

☞ Manufacturers of Yellow Poplar, Oak, Chestnut, Hemlock and White Pine.

☞ We own our own stumpage and operate our own mills.

☞ Correspondence solicited and inquiries promptly answered.

GENERAL OFFICES:
CONTINENTAL BUILDING.

Baltimore, Maryland

CYPRESS LUMBER

1s and 2s: 5/4"....	21845	Selects: 8/4".....	2620
6/4"....	8000	Shop: 5/4".....	715
8/4"....	3220	6/4".....	13925
Tank: 8/4".....	8360	8/4".....	4340
Selects: 5/4".....	39320	Common: 5/4".....	142370
6/4".....	11500	6/4".....	50925

RUSSE & BURGESS, Inc.
Memphis, Tennessee

2 cars 4/4 No. 1 Com. P. W. Oak.	2 cars 6/4 No. 1 Common Poplar.
1 car 4/4 FAS W. Oak.	8 cars 8/4 No. 1 Common Poplar.
1 car 6/4 No. 1 Com. W. Oak.	3 cars 10/4 No. 1 Common Poplar.
1 car 8/4 No. 1 Com. W. Oak.	2 cars 12/4 No. 1 Common Poplar.
3 cars 6/4 No. 1 Com. P. R. Oak.	1 car 4/4 Saps & Selects Poplar.
2 cars 8/4 No. 1 Com. R. Oak.	3 cars 8/4 Saps & Selects Poplar.
5 cars 5/4 No. 1 Common Poplar.	

The above stock can be shipped immediately
Write for prices to nearest office

FAUST BROTHERS LUMBER COMPANY

Sales Office
1319 Fisher Bldg., CHICAGO

Main Office
PADUCAH, KENTUCKY

FIRE
INSURANCE

Lumber Underwriters

66 BROADWAY
NEW YORK

A. F. PERRY, Manager.



Table of Contents



COVER PICTURE:—The Coming of the White Man	Page
REVIEW AND OUTLOOK:	
General Market Conditions.....	15
The Trend of Dimension Conditions.....	15
Reforestation	15
The Coming of the White Man.....	16
Lumbermen's Fire Insurance	16
The Government's Timber	16
Weed Trees in the Woodlot.....	17
High Water Mark Passed.....	17
What the Meeting Brought Out.....	18
The Consumer Needs Education.....	18
Car Conditions February First.....	18
A Worthy Suggestion	19
CARTOON:—A Logical Apprehension	19
AMERICAN FOREST TREES:—Black Cottonwood.....	20
SPECIAL ARTICLES:	
Canadian Rate Hearing at Cincinnati.....	21
Universal Names Needed for Trees.....	22
Hardwoods on the Pacific Coast.....	25
Steaming Lumber Under Pressure.....	26
Supply of Paper Birch Not Decreasing.....	27
The Forests of Mindoro.....	27
Unknown Things About Wood.....	28
New Zealand Hardwoods Might Prove Satisfactory in America	28
Personality in Salesmanship	34
Exports and Imports for December.....	34a
Useless Hardwoods Will Have Value.....	34b
The Co-Operative Spirit	34c
Lumbering in Jamaica	34b
LUMBER ASSOCIATION MEETINGS:	
Northern Hemlock and Hardwood Manufacturers' Assn.....	23
Hardwood Manufacturers' Association of the U. S.....	29
Miscellaneous	35-37
THE MAIL BAG	35
NEWS MISCELLANY	35-40
HARDWOOD NEWS NOTES	40-46
HARDWOOD MARKET	46-49

SUBSCRIPTION TERMS: In the United States and its possessions, and Canada, \$2.00 the year; in foreign countries, \$1.00 extra postage.

In conformity with the rules of the postoffice department, subscriptions are payable in advance, and in default of written orders to the contrary, are continued at our option.

Instructions for renewal, discontinuance, or change of address, should be sent one week before the date they are to go into effect. Both old and new addresses must be given.

Both display and classified advertising rates furnished upon application. Advertising copy must be received five days in advance of publication dates.

Entered as second-class matter May 26, 1902, at the postoffice at Chicago, Ill., under act of March 3, 1879.

OAK FLOORING

Kiln-
Dried
Polished



Hollow
Backed
and
Bundled

ICHABOD T. WILLIAMS & SONS

Foreign and Domestic Woods
In Logs, Lumber and Veneers

11th Ave. and 25th Street
NEW YORK

910 So. Michigan Avenue
CHICAGO



Hardwood Record

Published in the Interest of the American Hardwood Forests, the Products thereof, and Logging, Saw Mill and Wood-Working Machinery, on the 10th and 25th of each Month, by

THE HARDWOOD COMPANY

Henry H. Gibson, Editor and Manager
Edwin W. Meeker } Associate Editors
Hu Maxwell }

Entire Seventh Floor Ellsworth Building
537 So. Dearborn Street, CHICAGO
Telephones: Harrison 8086-8087-8088



Vol. XXXV

CHICAGO, FEBRUARY 10, 1913

No. 8



Review and Outlook



General Market Conditions

THE HARDWOOD MARKET remains without break in its distinct strength in nearly every variety, grade and thickness of hardwoods. Plain oak in all grades is easily the distinct leader both in values being secured and in demand. Stocks of both white and red oak in first hands, in shipping condition, are extremely meager. The leading producers of quartered white oak on the basis of recent analysis made of its holdings, find that the big producers, involving possibly a half of the stock held in first hands today, have less than ten million feet of quartered white oak in stock. A most liberal estimate of all quartered white oak in first hands in shipping shape today would be surely less than twenty million feet, which is certainly a reversal of stock form from the condition obtaining a year ago. Nearly all southern hardwoods are in equally low supply and almost as much in demand.

Owing to the wide spread of values between red and sap gum, the sap end of this product is in remarkably strong demand with very little dry stock to be secured. The price of sap gum is ranging below its intrinsic value, and it is more than likely that fully a five-dollar advance on saps will be secured to place the value on a corresponding plane with red gum within a very short time.

In the northern hardwoods this situation is about parallel with that existing in the South. Maple is holding its own well and there is such an insistent demand for birch that dry stocks are practically exhausted, and a good deal of lumber is sold in advance of the saw.

The trade in the softer of the hardwoods—poplar, basswood and cottonwood—is also reasonably active at a very fair scale of values.

When it is known that stocks in the hands of the jobbers and consumers still remain very low, it is a question where all the apparently necessary stock to take care of manufacturing enterprises is going to be secured for a considerable time to come.

The weather conditions in both the North and the South have been very unfavorable for getting in logs, and it will be sometime before logs can be secured in sufficient quantities to operate sawmills at their full capacity.

A good many conservative hardwood operators feel that there is a danger in the attainment of too high values on several items of hardwoods, and are advancing to their neighbors in the trade the suggestion that prices on especially short items should not be advanced any further, believing that eventually it will militate against a state of satisfactory demand.

The Trend of Dimension Conditions

IN THE ISSUE of January 25, HARDWOOD RECORD published an editorial review of observations covering estimated requirements of the hardwood consuming trade as gathered for the purpose of

compiling in the bulletin service covering such requirements. Further observations of reports coming in since then indicate what may be a mere coincidence or, on the other hand, a change in requirements of dimension stock. In a considerable number of cases, concerns listing dimension stock in hardwoods among their requirements have crossed out old dimensions and replaced them with dimensions which are considerably larger than those utilized in former years. This applies of course only to squares and stock of similar nature. As stated, this may merely be a coincidence, and it must be confessed that it is rather difficult to find any real reason for any such change in requirements. Letters addressed to concerns so changing their dimension stock requirements and also to large manufacturers of dimension have failed to establish any definite reason why dimension stock in larger sizes should be used during the coming year than formerly. One large dimension manufacturer, however, reports that for a long time he has not made anything to speak of smaller than inch and a half squares, and only a small amount of these. It may be that the dimension consumers are finding it relatively less expensive to buy dimension stock which they can rip at once to the exact required dimension than to buy squares cut exactly to meet their measurements.

The consensus of opinion, as expressed in communications from several large dimension manufacturers, indicates an extremely brisk demand for dimension material and in most instances the communications stated that increasingly favorable prices are being realized on dimension stock. This would indicate that the manufacture of dimension, as carried on by the limited number of concerns which have intelligently analyzed this branch of hardwood production, has been placed on the basis of a separate business, and it would further indicate that the consumer of dimension stock has come to realize that the difference in price between dimension lumber and ordinary stock is considerably less than the increased cost to him of re-manufacturing his entire stock from standard sizes of lumber.

Reforestation

A CAMPAIGN to effect reforestation in this country for the purpose of providing material for the future is being agitated by the National Implement and Vehicle Association, with headquarters in Chicago. The industries which are included in the membership of the association are large consumers of wood, and they are face to face with a situation which they regard as serious. They are still able to obtain material, but the most suitable kinds are becoming scarce, and in many instances the long hauls add so much cost that prices are nearly prohibitive. Different kinds of wood are brought together from every part of the United States.

The association recently addressed a letter to Gifford Pinchot, president of the National Conservation Association, suggesting that the

government should increase its activities in the way of reforestation, and that it should not only retain and plant what land it has now, but should enlarge its work to the extent of taking charge of planting in states where there now is little or no government land. The reason assigned for taking up the work in new fields is that the government is better able to do it, can work on a broader basis, and do it with greater economy.

The question is far-reaching, and there are certain dangerous shoals that must be avoided. Under existing laws, and in the present condition of public opinion, it is doubtful if the government could buy land for the purpose of growing timber. It can plant land which it owns, and it should do so, and doubtless will as rapidly as circumstances allow; but the buying of land and planting timber in states generally would meet opposition sufficient to defeat the purpose.

Fortunately, many of the states are earnestly at work along these lines. They are acquiring land and planting timber, and private owners are encouraged to do the same. Unquestionably, the bulk of timber planting in this country, except on government land, must be done by private owners. The states can offer encouragement in the way of fire protection, and in favorable tax laws. Many states are doing this, or attempting to do it. Active work is being done in many regions, under state laws and regulations. The actual planting of timber has not yet been undertaken on a large scale in many localities, but present interest in the subject will lead to practical results. There is no lack of good intentions, but good intentions alone will not suffice. There must be works as well as faith.

The Coming of the White Man

THERE IS ROOM for various interpretations of the illustration on the cover of *HARDWOOD RECORD* this issue. It is made from a photograph of a monument in a public park at Portland, Ore. The Indians are looking intently into the distance, but the object at which they are gazing is not shown in the illustration, and each person is left to decide for himself what it is they see—whether a hunter with his long rifle, of the type familiar to the readers of Cooper's novels; whether a covered wagon like the historic prairie schooners; whether the white sail of a boat approaching a shore or tacking slowly up the current of an inland river. The Indians in their native homes saw the white man come in all these ways and in many others. He came in peace, and he came in war; he came as a trader, as an explorer, as a missionary carrying a cross and a bible, and he came seeking protection from enemies, or refuge from starvation.

There are no two accounts of how the Indian received the white man who came in peace. He was received, as he asked to be received, in peace, and the Indian shared with him the best he had and all he had. Neither are there two accounts of the Indian's reception of the white man who came in war. He was received in war. The red man permitted none to surpass him in sacrifices for friends; nor could any surpass him in the ferocities of war. He was a man of extremes, and knew no middle course, and refused to learn any middle course.

The faces of the Indians have been given strong expressions by the sculptor. One seems inclined to welcome the coming stranger, but the other clearly intends to wait for further developments before he expresses himself. He proposes neither to advance nor retreat.

The illustration is supposed to be the Pacific coast Indian, looking eastward, for the white man came to that region overland, not by sea as along the Atlantic coast. Yet the physiognomy is typical. It would fit a Mohawk as well as a Modoc. It is the face of the forest man, the hunter, the fighter, the wild tribesman who once held dominion of the two continents, from the Pacific to the Atlantic, and from the Arctic shores to Terra del Fuego. He held it during untold ages, but he developed no resources, he built no ships, no cities, no highways; he opened no mines, erected no factories, and the coming of the white man marked the end of the reign of savagery and the beginning of civilization.

It has been erroneously supposed by many that forest destruction began with the white man's coming. The beginning was long before, and the Indian was the destroyer. There is reason to believe that

forests once extended west to the edge of the semi-arid region, say about to the one hundredth meridian. The destruction is laid to the Indian who used fire to open the wilderness and make pasturage for the buffalo. He had been burning for probably hundreds of years when the white man appeared on the scene. Most of the open prairies west of the Alleghany mountains, and particularly in the states of the Middle West, are believed to be the work of Indian fires. The burnings had reached the Atlantic coast when Europeans arrived. Nathaniel J. Shaler, in his book on "Man in North America," expresses the opinion that if the white man's coming had been delayed five hundred years he would have landed upon a treeless continent. The Indian would have burned everything that would burn; grass would have had possession wherever conditions would permit its growth; the buffalo and other herbivorous animals would have roamed the vast pastures in untold numbers; and the Indian would have been living by the chase alone, and would have ceased his attempts at primitive agriculture.

The coming of the white man was, therefore, a momentous event in the history of America. He checked the destruction of the finest forests in the world, and saved their remnants for the use of civilization. Without those forests, American civilization must have taken an entirely different course, and who can say that it would not have been hindered and in part defeated?

In this larger view, what is the meaning of the monument—the White Man's Coming? Is some glimmering dawn of the truth breaking on the Indian's proud soul and benighted intellect, and does the white man's appearance on the scene mean to the red man what the handwriting on the cornice of the feast hall of Babylon meant to Belshazzar—"Weighed, weighed, and found wanting"?

Lumbermen's Fire Insurance

THE EIGHTH ANNUAL REPORT of the Lumbermen's Underwriting Alliance of Kansas City, which was recently issued, calls attention to an important business arrangement formulated by the lumbermen for their mutual benefit. This is one of the insurance associations which in recent years have given lumbermen insurance at cost. Success has shown the wisdom of the plan. Losses are borne by all and profits and advantages are shared by all. It is as nearly mutual insurance as has yet been put in successful practice.

Among the good features of the plan is the keeping down of expenses to the lowest point consistent with efficiency. No dead load is carried. Nobody is paying for what he is not getting, and nobody gets what he does not pay for. Another good feature is the careful inspection of property to see that the proprietors incur no unnecessary risks. They must keep their premises in order, and take all reasonable precautions against danger of fire. By that means the losses are reduced to a minimum, and the cost of insurance is kept at the lowest point.

It can be said of the plan as a whole that it has been a success. It runs smoothly and attains the end desired. It has been worked out gradually, improved as experience has shown better ways, has been carefully brought up to its present state of efficiency, and as far as can be foreseen, it is a permanent business institution in this country.

The Government's Timber

THE DEMAND which is made in different parts of the country that the government sell its timber cheap, or give it away, in order that consumers may buy lumber cheap, is ill-advised. It means simply that the government ought to break the market and demoralize prices. Such a policy is ill-advised for two reasons: In the first place, there is no just reason why the lumber markets should be broken. The men engaged in the business are making no more than legitimate profits, and some of them not that. There are enough sawmills in the country to cut much more lumber than is being cut, and it stands to reason, if profits were large, those mills would be running at full capacity. That fact alone is sufficient answer to the charge that lumber is being sold for more than it is worth. In the second place, if the government should be so unbusiness-like as to attempt to upset the market by selling its timber for little, or giving it away, it is doubtful if it could accomplish that purpose.

It might give timber to contractors, but the contractors would simply accept the gift, and when they cut the timber, they would sell it at the market price, the same as lumbermen are doing now, and there is no reason to believe that the price would come down one cent. The government would be making a present of the timber to the contractors, not to the consumers.

Some critics of the government's timber policy go so far as to suggest that the United States should go into the lumber business, build mills, saw its own timber, and put it on the market at cost, selling it direct to the consumer when possible, and thereby "break the price." It is difficult to conceive that such a suggestion could be made in seriousness, for it would be revolutionary, destructive, and would inevitably defeat the end sought, which is cheap lumber for the consumer. Suppose, by way of argument, that such a thing were attempted. There is no question that the government could build mills, saw its own lumber, and throw it on the market in quantities and at figures which would drive competitors out of business temporarily; but it would be only temporarily. The government has not enough timber in reach of market to last long at that rate. It would quickly cut, deplete, and destroy all available government timber in the forest reserves. Meanwhile the owners of private timber would close their mills and wait for the era of foolishness to pass—and it would pass quickly. Then the private owners would have a monopoly. The government's timber would be gone, and competition from that source would be impossible. The owners would then have the market in their own hands, and the Forest Service would be powerless to sell timber or lumber at any price. There is good ground for suspicion that such is precisely what the critics of the government's timber policy would like to see—the Forest Service out of the way for all time.

The government last year sold 800,000,000 feet of timber for all purposes, lumber, mine props, posts, and fuel, at an average price of two dollars a thousand feet on the stump. That was not more than one per cent of the total forest products of the country. The sales were advertised extensively and the highest prices possible were obtained. There was no attempt to break or boost the market, but sales were made just as a conservative private owner would have made them. All Forest Service timber is not in reach of market at this time. Some of it could not now be given away, with the stipulation that it be cut and marketed, but there is no question that it could be given to speculators who would hold it for rise in value.

The time will come when the people of this country will fully appreciate the stand which the Forest Service is now taking to preserve timber for use in the future, as well as for conservative use in the present.

Weed Trees in the Woodlot

ALL THE WEEDS which lessen the value of crops are not those growing in gardens, wheatfields, and among the rows of corn. The forest has its weeds the same as fields have, but the unprofitable forest weed is not the nettle, lady slipper, spikenard, Indian turnip, snake root, and the hundreds of other animal plants which cover the ground in spring and summer and die in winter. There are trees which are as truly weeds as any that choke the crops which the farmer

plants. They are the trees which never grow into value, or grow so slowly that they are unprofitable; yet they demand as much space, as much nourishment, as much light, as the valuable species which increase rapidly in size and come to maturity quickly.

In the wild woods, where nature is the only forester, the weed trees are looked upon as unavoidable. The trees of all sizes, kinds, and conditions struggle for mastery, and it is sometimes a survival of the fittest, and sometimes it is not; but men accept what nature gives.

A new kind of forest is coming to the front in this country. It is known as the woodlot or "the farmer's woodlot," because it is usually a part of a farm. In the past forests of that kind have not been of much importance in this country, but they are going to be in the future. The natural forests, in their wild state, are passing, and in many of the older states they have practically ceased to exist; and local supplies of timber must come from woodlots.

Take Indiana as an example of a woodlot state. Originally that region contained some of the finest hardwood forests in the whole country. Several important species reached their highest development in the southern part of Indiana. Forests are now few and small; but in their place are farmers' woodlots aggregating four million acres in that one state. These lots are growing timber. The people who own them are not keeping them and paying taxes on them for sentimental reasons, but for profit. The men are growing timber for their own use, and also to sell—saw-logs, lumber, posts, and fuel. Similar conditions prevail in many of the old states, and will sometime prevail in practically all of the states.

It is not profitable to grow weed trees. The owners who look after their interests will not permit trees to occupy space, unless they promise profit. They should be cut out, and their room given to trees which make returns on the investment. More than five hundred kinds of trees grow naturally in the United States; but half of them are useless for timber purposes. The really profitable trees for woodlots scarcely number fifty. There is

no profit in growing a dogwood where a chestnut, basswood, or yellow poplar will grow, nor in permitting scrub pine to occupy ground where white pine might be growing.

The thinning of woodlots by removing the small, unpromising trees, and replanting vacant spaces with species which grow rapidly and produce valuable wood, will become the prevailing custom in the old sections of the country. There is no more profit in tree weeds than in the weeds which choke the field crops. The time to harvest the forest crop should be recognized as carefully as the time of corn harvest. Overmature timber is unprofitable, and to that extent, it is no less a weed than is the tree which is never large or fit for anything. Both should be removed to make room for trees which are capable of giving a good account of themselves.

High Water Mark Passed

AS HARDWOOD RECORD GOES TO PRESS, the high water mark at the lower Mississippi lumber points has just about been reached and in some instances a scarcely perceptible but actual recession of the water is noted. At all points along the Ohio the river has gotten down pretty near to normal for this time of the year and no further immediate trouble is anticipated at those points. In Arkansas unceasing rains have kept the country in a flooded condition

UNSOLICITED TESTIMONIAL

The Pyrono Process Company

Manufacturer of

Doors and Interior Finish

Columbus, O., January 7th, 1913.

HARDWOOD RECORD,
Chicago, Ill.

Gentlemen: We inclose herewith check for \$2.00 to cover subscription as noted in your bill of December 15th, which bill was mislaid on its arrival at the office and came to our notice only today.

We hope we shall not be compelled to miss any of the numbers of HARDWOOD RECORD, for we can say to you candidly that no periodical that comes to this office is considered of more value than HARDWOOD RECORD.

Very truly yours,

THE PYRONO PROCESS COMPANY,

David C. Meehan, Pres't.

and very seriously affected logging.

There is one feature of the flood situation which gives some measure of satisfaction and that is the fact that whenever there are two distinct flood periods in the first half of any calendar year, neither one of them is liable to be of extreme seriousness. The first flood stage seems to take the cap off of the second so that each reaches only a mean level.

It is anticipated that logging will be resumed again in the Arkansas territory in the near future. No notable damage has been done directly to the lumber business that amounts to anything comparatively, and there is no reason to fear future damage from high water.

What the Meeting Brought Out

LOOKING BACK to the meeting of the Hardwood Manufacturers' Association of the United States, held February 4 and 5 at Cincinnati, there are certain features which stand out above all others as distinguishing this particular convention. The absence of the usual entertainment features gave to the convention more of the tone of a business meeting than has heretofore prevailed. It must be admitted that the absence of such entertainment was noted by a number of those in attendance, but it cannot be said that it seriously affected their esteem for the association.

Viewing the convention proceedings from an increasing distance, the two most prominent things which strike the observer are the fact that there was a representative attendance covering practically the entire hardwood producing and stumpage covered sections of the country. Among the 500 present could be found manufacturers and timber owners coming from every region of importance to the hardwood industry of the United States. This alone, according to competent observers, presages future good for the association.

While the representative attendance was a feature of which those in charge of the convention can be justly proud, there were other things noticeable which augur equally well for the association's future. It was a noticeable fact that a great many large operators and timberland owners who have for years passed up hardwood lumber conventions were in attendance during the two days' sessions. Not alone did their presence support the association in a moral way, but their counsel and suggestions made the resulting proceedings of unusual value.

Too much credit cannot be given to the administration of the re-elected president, W. E. DeLaney. Mr. DeLaney has given the full benefit of a forceful and far-sighted personality and has entered heart and soul into the association work. His administration has been aggressive and progressive and has accomplished more direct good than the membership could realize by mere attendance at the convention sessions. The purport of what he has done will be realized only after the members have had time to reflect upon and digest the proceedings at Cincinnati. The fact that President DeLaney was compelled to accept the office of president for another term, against his expressed wishes, is a fair indication of the regard with which his administration has been viewed.

The Consumer Needs Education

THE QUESTION was recently advanced by an official of one of the largest electric machinery and appliances manufacturers in the country, as to the adaptability of a certain species of wood for a particular purpose. The wood in question was maple and it was used in large squares in connection with the manufacture of transformers of excessively high voltage. The conversation on this subject was opened with a statement by the official that several years of experimentation in order to determine the proper way of handling the squares, still found the company undecided as to exactly how to get the best out of this material.

The squares were formerly bought in size of 5x6 up to 8x8, but it was ultimately found entirely impractical and too expensive to purchase anything larger than 5x5 and 5x6.

It does not speak well for the lumberman who first sold these maple squares to this particular concern when one considers the statement that when this concern first started to use the material it believed that it could get the desired results by simply putting the squares into a

dry-kiln and rushing them for twenty-four hours. The idea is to dry thoroughly, after which the squares are immersed in a vat of superheated oil and then utilized.

The point of this editorial is the fact that the average consumer of forest products understands very little as to the proper utilization of what he buys. The manufacturer and wholesaler should hence make every possible suggestion that will enable the buyer of his goods to get the most satisfactory results from the wood that he uses. Otherwise he is going to change from one wood to another and perhaps eventually swerve to a substitute for wood.

This particular instance is a striking example of the lack of knowledge of wood physics on the part of such enormous buyers of wood as the concern in mind. The statement that after two years' work it is still having all kinds of trouble and experiencing an enormous waste of material is pretty conclusive proof that it needs education.

Getting back to the actual cause of the trouble, the official made the statement that the prime essential of the squares for the purpose for which they are intended is absolute dryness. He said that the company is now storing squares for six months under shed and then drying in a kiln, after which they are put into the oil bath. Imagine trying to thoroughly dry a 5x6 maple square in six months, particularly when a mere suggestion of moisture will result in the electricity gouging a hole completely through the square. It seems strange that the man who sold and is selling this company its squares could not have suggested that it buy them two, four or five years ahead and pile them, thus insuring complete dryness. This is merely one of those little things that the lumberman sometimes overlooks.

Car Conditions February First

A REPORT from the American Railway Association dated February 7 contains a statement of car surplus and shortage on February 1, with a comparative summary from October 25, 1911.

The total surplus February 1, 1913, was 62,045 cars; on January 15, 1913, the surplus was 53,230 cars; on January 31, 1912, the surplus was 55,592 cars.

The total shortage February 1, 1913, was 24,785 cars; on January 15, 1913, the shortage was 24,791, while on January 31, 1912, the shortage was 23,011.

Compared with the preceding period, there is an increase in the total surplus of 8,815 cars. Compared with the same date of 1912, there is an increase in the total surplus of 6,453 cars and an increase in the total shortage of 1,774 cars.

A Worthy Suggestion

A PLAN promulgated some time ago but outlined in detail in a letter read before the Hardwood Manufacturers' Association convention at Cincinnati last week, should, if it materializes, simplify the dimension stock business and put it on a basis that will insure profit to the dimension manufacturer.

The chief difficulty in making dimension stock at a profit has been the fact that it has been manufactured mainly from waste accumulation, and hence it was impossible to maintain stocks of any size. Further, if the manufacture of dimension were attempted by a concern doing nothing but this, the variation and lack of uniformity in dimension requirements would prohibit the piling up of sizes to any extent.

The suggestion would provide for a department of the Hardwood Manufacturers' Association, which would act as the selling agent for all members manufacturing dimension stock. This department would maintain a corps of men who would give close supervision to the manufacture of dimension at the different mills. It would also use its best efforts to standardize the sizes required by the consumers. Thus it would be possible to provide for the manufacture of sufficient stock ahead to take care of any order.

The difficulty in the past has been that many times orders have had to be refused because insufficient stocks made it impossible to fill them. With the proposed new scheme of things, however, the selling department maintained by the association would have the call on all dimension accumulations at the different mills, and furthermore, the mills could carry standard sizes in stock.



A LOGICAL APPREHENSION

A Million More

Patient—"You're a fraud! You guaranteed your medicine to cure after everything else failed, and——"

Medicine Man—"Well, probably you haven't tried everything else."

Not Wet Enough

Lambert Caspers, a Chicago attorney, told this story at a recent Y. M. C. A. banquet:

A Kansas farmer, a Dane, applied for naturalization papers. The judge asked him:

"Are you satisfied with the general conditions of the country?"

"Yas," drawled the Dane.

"Does the government suit you?" queried the judge.

"Yas, yas; only I would like to see more rain," replied the farmer.—*Judge.*

The Proper Head

Husband (studying his wife's accounts)—
"There are several items you haven't entered here. Doing up the furniture, your hairdresser, dentist, trip to the sea, for instance."

Wife—"Oh, those all come under the head of 'repairs.'"—*Fliegende Blätter.*

Getting Her on Record

"Am I the only man you ever loved?" he asked.

"Yes," she sighed.

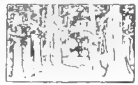
"There is no rich man whom you ever cared to marry?" he persisted.

"No rich man I would marry," she said.

"Or no rich man you might marry if you chose?"

"No, but why do you ask these questions?"

"I just want to get you on record before our wedding so that afterward you won't be forever pointing out wealthy men to me as samples of what you might have had." *Detroit Free Press.*



American Forest Trees



ONE HUNDRED-FIFTH PAPER

BLACK COTTONWOOD

(*Populus Trichocarpa* -Torr. and Gr.)

This member of the cottonwood group is a strong tree that holds its ground in various latitudes and at many elevations, ranging from sea level up to eight or nine thousand feet, and in latitude from Alaska to southern California, a distance of nearly three thousand miles. Its east and west extension is more restricted and seldom exceeds four hundred miles. Its habitat covers an area of half a million square miles, and in that space it finds conditions which vary so greatly that the tree which can meet them must possess remarkable powers of adaptation.

Beginning in Alaska and the interior of Yukon territory, it has an arctic climate. It there not only grows on the coast, but it strikes the interior. It appears on the headwaters of several streams which flow into the Mackenzie or Hudson bay. It passes south through British Columbia and enters the United States west of the Rocky mountains. It has been reported as far east as Idaho and Montana, but further information is needed before its limits in that direction can be definitely fixed.

When it enters California it prefers the elevated valleys and canyons of the Sierra Nevadas, though it occurs sparingly among the coast ranges. It is generally found in the Sierras at elevations of from 3,000 to 6,000 feet, though it occurs between 8,000 and 9,000. Among the San Jacinto mountains of southern California it grows at an altitude of 6,000 feet.

When it occurs at low levels it is usually found on river bottoms and sand bars, in sandy and humous soils, and there the largest trees are found. At higher elevations it is more apt to occur in canyon bottoms and gulches, in moist, sandy or gravelly soil, and in such situations the black cottonwood is smaller. The best growth occurs where the climate is humid and the precipitation is great. Beyond the reach of sea fogs, where the tree depends on soil moisture chiefly, it is smaller.

It is an intolerant tree. It must have light. When it is crowded a tall, slender trunk is developed and the small crown is lifted clear above its competitors into the full light. If it cannot succeed in gaining that position its growth is stunted or the tree meets an early death.

The black cottonwood is the greatest of the cottonwoods. This country produces no other to match it, and, as far as known, the whole world has none. The Pacific coast is remarkable for the giant trees it produces, but most of them are softwoods—the redwoods, the big tree, the sugar pine, Douglas fir, western larch, noble fir, Sitka spruce and western red cedar. This cottonwood is the largest of the Pacific coast hardwoods. In trunk diameter it is excelled by the

weeping oak in the interior valleys of California, but when both height and diameter are considered, the black cottonwood is in the West what yellow poplar is in the East, the largest of the hardwoods.

Sargent says this tree reaches a height of two hundred feet and a diameter of eight, but Sudworth is more conservative and places the trunk limit at six feet. The average size is much below the figures

given, but abundance of logs exceeding three feet in diameter reach the sawmills of Washington and Oregon.

Old trees range from 150 to 200 years in age, but trees under 100 years old are large enough for saw timber. Records of the ages of the largest trunks have not been reported.

Black cottonwood is a prolific seeder, but the seeds do not long retain their vitality. If they find lodgment in damp situations, where other conditions are favorable, the rate of germination is high. Seedlings are often very numerous on wet bars.

The excellent quality of the wood and its suitability for many purposes bring it much demand on the Pacific coast. In the state of Washington more than 30,000,000 feet were used by wood-using industries in 1910. Smaller quantities were reported in Oregon and California.

In strength the wood is approximately the same as common cottonwood, but in stiffness it much exceeds the eastern species. Its elasticity rates high, and compares favorably with some of the valuable eastern hardwoods. In weight it is slightly under common cottonwood. Trees are of fine form, nearly always straight, and are generally free from limbs to a considerable height.

The wood is grayish white, soft, tough, odorless, tasteless, long-fibered, nails well, is easily glued and cuts into excellent rotary veneer with comparatively small expenditure of power. It does not split easily after it has undergone seasoning, and this property commends it to boxmakers. It is little disposed to shrink and swell in atmospheric changes. The absence of odor

and taste gives it much of its value for box making, because foods are not contaminated by contact with the wood.

It is manufactured into veneer berry baskets and is one of the most suitable woods on the Pacific coast for that purpose. Candy barrel makers use it in preference to most others, and a long line of woodenware articles draw much of their material from this source. Many thousands of cords are cut yearly for the pulp mills, where material for paper is produced. Black cottonwood and white fir are the principal woods used for pulp on the Pacific coast.



FOREST GROWTH BLACK COTTONWOOD. CHELAN COUNTY, WASHINGTON

Not only is it used for rotary-cut veneer, but it is made into cores or backing on which veneers of costly woods are glued in the manufacture of furniture, interior finish and fixtures for banks, stores and offices. It serves in the same way in casket making, and is demanded in millions of feet.

It is employed in amounts larger than any other wood by excelsior mills in the northern Pacific coast region. It is the only wood demanded by that industry in Washington and 6,400,000 feet were cut into that product in 1910.

Slack coopers find it as valuable in their business in the far West as the common cottonwood in the East, and hundreds of thousands of staves are made yearly. It is in demand for the manufacture of flour barrels and those intended for other food products.

Trunk makers use it in three-ply veneers for the bodies, trays, boxes and compartments of trunks and for suit cases. Though soft and light, it is very tough, and sheets of veneer with the grains placed transversely resist strains much better than solid wood of the same thickness.

Vehicle makers employ black cottonwood for the tops and shelves of business wagons. Another of its uses is as bottoms of drawers for

bureaus, wardrobes and chiffoniers and as partitions in desk compartments. A full line of kitchen and pantry furniture is made wholly or in part of this wood in the regions where it is cheap and abundant.

The cottonwoods belong to a very ancient race of broadleaf trees, and like several others, they seem to have had their origin, or at least a very early home, in the far North, where intense cold now excludes almost every form of vegetable growth except the lowest orders. The Cretaceous age saw cottonwoods growing in Greenland. The cotton which then, as now, carried the seeds and planted them fell on more hospitable shores than can now be found in the far frozen North. The genus was not confined to the arctic and subarctic regions, however, for there were cottonwoods at that time, or later, in more southern latitudes. There were many species in the central portion of this country, and also in Europe, long before the ice age destroyed all the forests north of the Ohio and the Missouri rivers. Some of the old species long ago ceased to exist, but others appear to have come down to the present time without great change.

The cottonwood shows wonderful vitality, which is doubtless a survival of the characteristic which enabled it to come down from former geologic epochs to the present time. A damaged and mutilated tree will recover. A broken limb, thrust in the ground, will grow.



Canadian Rate Hearing at Cincinnati



Lumbermen expect to see a large advantage gained in the controversy over the proposed Canadian rate advancement as a result of the developments at the final hearing of the testimony before Interstate Commerce Commissioner Balthazar Meyer, at the Federal building, Cincinnati, January 24 and 25.

The testimony presented by the many witnesses showed conclusively that Canadian receivers of lumber are distinctly opposed to the advancement in tariffs.

Another valuable point scored by the lumbermen was the favorable construction placed by the commissioner on the demand, through the attorneys for the shippers, that complete records of data before the freight associations' meetings be produced before the commission.

Commissioner Meyer announced that the brief of the railroad must be filed with the commission on or before February 25, and the briefs of the contesting shippers within fifteen days thereafter. He stated that other arguments would be heard before the commission in Washington in the second week of March, providing the calendar of the commission would permit.

The proposed rate increases, which it is estimated would increase the cost of hardwood and southern pine to Canadian points east of Detroit by one dollar to two-and-a-half dollars a thousand feet, were published by the railroads prior to September 1, 1912. On that date the commission, acting on protest by lumbermen, suspended the tariff until September, but at the conclusion of the suspension period the suspension was continued until June 30, 1913.

Lumbermen at points south of Ohio river crossings claim that the increased tariff would practically ruin the export business of southern lumber manufacturers to Canadian points. Representatives of the trade from Memphis, St. Louis, New Orleans and Arkansas points were present, there being an even dozen of outside lumbermen in attendance. Other interests represented were Canadian associations, International Harvester Company, manufacturers of the furniture section of the Canada Manufacturers' Association of Toronto.

Walter Wellford of Memphis was the first witness at the opening session. In testifying for the coopers' business he said that ninety-five per cent of the staves sent to Canada are shipped to points east of Detroit. He testified that railroads are now asking more money per unit than they did ten years ago, and that improved equipment and increased speed permits them to turn even a greater profit than formerly. This testimony was offered in order to show the raise is not a necessity to return a profit to the railroad company.

E. E. Eversull, traffic manager of the W. T. Ferguson Lumber Company of St. Louis, was the next witness. This company has mills in

Louisiana and Texas. The witness produced letters from various individuals and firms interested in the advance, which tended to show such advances would work a material and lasting hardship on the industries affected. Mr. Eversull stated that yellow pine men will have to cut prices on yellow pine on Canadian deliveries about \$2.50 per thousand or get out of the Canadian business if these advances go into effect, as the competition from fir lumber will tend to make this change necessary. He stated that all rates from southwestern territory are based on Cairo.

B. M. Krebs, manager of the McLean Hardwood Lumber Company of Memphis, Tenn., was then called. Mr. Krebs showed that of fifty-two points in Canadian territory that would be affected by the change, three were lowered and the balance raised. Mr. Krebs offered many letters from Canadian receivers of lumber stating that they were decidedly opposed to the intended advances. His testimony was for the purpose of showing that the advances are merely with a view of increasing the revenue for Canadian lines, and not for the purpose of equalizing rates, as Mr. Martin, representing the roads, stated at the St. Louis meeting. The matter was debated by these two gentlemen.

Frank Robertson of the Anderson-Tully Company of Memphis was the first witness in the afternoon session. Mr. Robertson said that if the advances went into effect the southern manufacturers would be seriously crippled in their efforts to secure Canadian trade and would likely be shut out entirely. He stated that the lumber thus barred from Canadian points would necessarily have to be marketed locally, with the resultant demoralization of the general lumber business.

J. H. Townsend, traffic manager of the Southern Hardwood Traffic Bureau of Memphis, Tenn., followed Mr. Robertson and read a statement showing that the proposed advances would affect four hundred Canadian points.

T. A. Sledge of May Brothers, Memphis, read a number of letters of protest from all sections of the southern shipping territory.

J. J. Bruner of the E. Sondheimer Company of Memphis declared that the real reason for the advance was that the Canadian lines had attempted to secure additional revenue as their proportion of the through rate, and not having been successful in obtaining it from connecting lines took the initiative in agitating increased rates. Mr. Bruner said that he could substantiate his statement by giving the source of the information.

J. D. Allen, Jr., of the Darnell-Taenzer Lumber Company, Memphis, Tenn., reviewed the many new developments in the lumber busi-

ness with which the lumber manufacturer has had to contend as the years have gone by. He stated that further increase of Canadian rates was entirely unjust and would work a distinct hardship.

Elliott Lang of R. J. Darnell, Inc., Memphis, testified against the attitude of the railroad representatives to show that the amount of lumber shipped to Canadian points was limited. He claimed that if this export business were shut off, as it undoubtedly would be if the advances in rates were sustained, it would have the tendency to throw a lot of the millwork now going into that territory onto the American markets. Mr. Lang laid particular stress upon the increased cost of stumpage and operation to the sawmill men.

Mr. Lang again took the stand for the Friday night session, but was shortly excused and was followed by Philip B. Gordon of Montreal, who stated that his business is principally in yellow pine and fir timber. Mr. Gordon said that the high rail rates are responsible for the increased cargo shipments of pine to Canadian points. He said that this water transportation will undoubtedly increase during the coming year. Mr. Gordon, in speaking for Canadian consumers, said that if the advances went into effect they would undoubtedly exclude pine from the Canadian markets in favor of western fir. He further said that Canadians are distinctly opposed to the advances.

Mr. Gordon gave the longest testimony of any of the witnesses and his testimony made a very favorable impression upon the commissioner. The railroad representatives failed in every instance to confuse or to disprove his statement.

H. C. Martin, general freight agent of the Grand Trunk line, opened Saturday morning's session. He offered some interesting statistics, showing shipments to Canadian points from connecting lines in the United States. It was noted that many of the cars shown in the statement were principally for railroad material.

Mr. Martin was followed by J. P. Pattendorf, general freight agent for the Illinois Central Railroad at Memphis, Tenn. He showed the Illinois Central's portion of the through rates and also the variation in proportions where railroads gained in one place and lost in another. He then stated that the old custom of fifty years ago, when all rates terminated at Ohio river crossings, might be acceptable to many lines.

A general discussion followed among the attorneys. Attorney Wolter insisted upon a definite reply from the railroad representation as to whether or not they would comply with his request to produce the complete records of the meeting of the Canadian Freight Association, Central Freight Association, Southwestern Lines Association, Mississippi Valley Association and the Southeastern Association.

Mr. Martin, in speaking for the railroads he represented, said that he could not speak for other lines, but that as far as he was concerned he would decline to furnish any such data, as it was not public property.

Judge Moore, also representing the roads, stated that he would confer immediately with his clients and that he had no doubt that the information desired would be cheerfully given, especially if the commission so ruled. He stated that, in his opinion, the commission had the right to demand such papers.

Commissioner Meyer stated that inasmuch as these records may assist the commission they might be valuable to it, but he did not wish to take the responsibility of ordering them produced without first conferring with his colleagues at Washington. He then ordered the railroad representatives to prepare their briefs and have them filed with the commission in thirty days, and the shippers to file theirs within fifteen days after.



Universal Names Needed for Trees



The number of commercial woods imported into this country is much larger than is generally supposed by those who have not looked into the subject. A study of the kinds of useful and ornamental timbers shipped into the United States is not only an interesting, but at the same time a very difficult undertaking. Foreign woods are enumerated in the official trade returns as coming under the following classification of common or trade names: Mahogany, cedar, rosewood, satinwood, lignum-vitæ, ebony, boxwood, granadillo, lancewood, logwood, and fustic. The bulk of the woods which are now imported are entered under the above names. There are, however, many other woods which are shipped into this country only in small quantities.

Practically all timber merchants put a great deal of reliance or high value on common names. A little knowledge of the timber trade will soon convince the thoughtful inquirer that there are no less than fifty entirely different woods known as mahogany, and equally as many called cedar. The commercial name has a relation merely to the physical appearances or characters of the woods or to the country from which the wood was shipped. A good many woods having only a remote resemblance to mahogany are often sold as mahogany. Lagos, Benin, Nicaragua, Brazil, and Panama wood are named after the country from which they originate. Then again there are names which are very general in their application, as for instance "madeira," which means wood, and is sometimes applied in the trade to mahogany, tamarind, etc. In the East Indies the word "poon" is a name given by many of the tribes or nations to any tree. The early traders who heard the name "poon" applied to the particularly noted tree (*Calophyllum inophyllum*) in the East Indies at once concluded that this was its regularly accepted common name. Later other traders heard the name applied to entirely different trees and today a number of unrelated species are called "poon."

While such names are sometimes helpful in tracing down the true name of the wood, one must not put too much reliance on them. The names given to trees by the uneducated people are at best very uncertain and fluctuating. This is often true even in civilized countries,

as in the United States, where a single tree sometimes has a dozen or more common or local names. On the other hand, the same name is frequently applied to more than one species of trees. There are in this country no less than six genera whose woods are called cedars. Latterly the substitution of inferior wood for better kinds has been practiced so extensively that a number of the recently introduced woods have been given the names of the woods for which they are being substituted. A good example of this is the okoume (*Boswellia klainea*) of West Africa, which is used in place of the Spanish cedar for making cigar boxes, and is now commonly known as cedar.

A great many of the native names of trees of foreign countries are constantly being changed or corrupted by travelers, who have merely run through a region as collectors and are not familiar with the language. This is true particularly in Latin America, where a good many Indian and Spanish names have been so corrupted that it is difficult to recognize them in print. Sucopira, seupira, sepepera, and sepibira (*Bowdichia virgilioides*) illustrate this case and show that there is an entire lack of rule in spelling these native names. The Indians of tropical America, for instance, have no rule for nomenclature, and they have no means of producing a uniformity of names and very frequently confound one name with another. The reliance on these names very often leads to mistakes, instead of proving an aid, in tracing down the botanical name of commercial wood unless one is well acquainted with the wood structure of the different groups of trees. Owing to very different woods having the same common names, occasionally very serious mistakes originate by erroneously substituting a wood when one of an opposite kind was intended. This is frequently the case with respect to our southern pines. Both the loblolly and longleaf pines are called longleaf pine in certain localities. The substitution of loblolly for the more durable longleaf has frequently resulted in very serious losses. An effort should be made to determine upon a commercial name for each important wood, and if such a nomenclature would be followed by all dealers the number of errors would be greatly reduced. L. L. D.



Annual of Wisconsin Manufacturers



The fourth annual meeting of the Northern Hemlock and Hardwood Manufacturers' Association was called to order the morning of Wednesday, January 29, at the Hotel Pfister, Milwaukee, Wis., by President E. A. Hamar.

After the roll call and reading of the minutes of the previous meeting, President Hamar delivered his address.

The president told of the change in the inspection department whereby the headquarters of the chief inspector were moved to the Wausau office, while the number of inspectors was reduced from three to two. By making these changes the association finished the year 1912 with an excellent balance on hand.

President Hamar thanked the members of the various committees for their assistance during the past year. In outlining the work done by the various committees, he said that the grading rules committee had recommended a new set of rules for the grading of hemlock. He stated that the old rules were obsolete and needed revision, and that he endorsed the committee's efforts and recommended that the rules it submits be favorably acted upon.

He reviewed the work of the advertising campaign on hemlock and birch, and said that it has already been demonstrated that it is a work that should be continued and followed up. According to the speaker, the secretary's office is daily receiving inquiries from architects and builders, which inquiries are the direct result of the advertising.

The speaker recommended that in the future members of the committee should be allowed expenses incurred in gathering for committee meetings. While this question was covered in a provision of the by-laws the committeemen have never taken advantage of it.

In speaking of the proposed Forest Products Exposition, President Hamar stated that he would like to see action taken on any method by which lumbermen could give further assistance in getting the exposition started. He stated that it is poor business policy for lumber manufacturers to remain inert while cement, brick and patent roofing manufacturers hold their exposition and gain the resulting advertising.

President Hamar said that 1912 had been a fairly satisfactory year and that the indications are that 1913 will be a year of prosperity.

The report of the treasurer followed the address of President Hamar. It showed a balance on hand January 29, 1913, \$169.11; received from secretary during the year, \$22,587.10, making a total of \$22,756.21; vouchers paid aggregated \$19,469.50, leaving a balance on hand January 27, 1913, \$3,286.71.

Secretary Kellogg, in his report, reviewed the past year's work of the association and of the members of the various committees, stating that it was one of prosperity for the association. He thanked the committee members very heartily for their co-operation.

In speaking of statistics for the year, the secretary said that at this time in 1912 reports indicated an increase of 10 per cent of stock on hand in comparison with January 1, 1911. On the other hand, there has been approximately 35 per cent decrease in stocks during the past year, while in the stock on hand unsold the decrease is even greater.

In hardwoods, decreases in stock on hand unsold were 78 per cent for ash, 37 per cent basswood, 30 per cent birch, 63 per cent rock elm, 60 per cent soft elm, 28 per cent hard maple, 67 per cent soft maple and 22 per cent oak, an average of 38 per cent decrease in hardwood stocks on hand unsold during the year 1912.



E. A. HAMAR, CHASSELL, MICH. PRESIDENT
OF THE NORTHERN HEMLOCK AND
HARDWOOD MANUFACTURERS
ASSOCIATION

Shipments of hemlock and hardwoods by association members during 1912 were over 200,000,000 feet in excess of 1911. This increase in shipment and decrease in production is what brought about the general scarcity of northern stocks on hand today.

The secretary said further that as the winter advances it becomes increasingly evident that there is little possibility of the log input this year being as great as the log input of last year, so that whatever takes place it is hard to figure out any chance of lumber stocks getting back to normal within the next year.

In looking ahead for the coming year, the secretary said that many contracts already made will result in a profit if it is possible to get logs, and other contracts just as good are being made every day. Consequently the trouble for the lumbermen this year is of an entirely different character than all their troubles were in 1908, 1909, 1910 and 1911.

Chairman W. G. Collar of the railroad committee then submitted his report. The report touched upon the complaint of the paper men to the railroad commissioner, of the unjust discrimination in freight rates on logs destined

to be manufactured into lumber and logs to be manufactured into paper. When notice of complaint was served on the railroad they asked the railroad commission to have the association made a party to the hearing, and the railroad commission accordingly notified Secretary Kellogg that association representatives would be expected to appear at Madison on a specified date to discuss the rates on logs from the woods to the mill.

Preceding the hearing log shippers of Wisconsin met in conference with the railroad men at Chicago and were assured by the railroad representatives that they were willing to let the log rates stand, but that if the commission decided the rates showed unjust discrimination it would be necessary to raise the log rate to the rate on cordwood and bolts and pulpwood. This, of course, would have worked a considerable hardship on the sawmill men and seriously militate against their profits. The report stated that the commission still had the matter under consideration, but that a favorable opinion was anticipated.

Another matter discussed in the report was the question of milling-in-transit and the amending of rule 76A as promulgated by the Interstate Commerce Commission. Mr. Collar said that he was present at the hearing at Washington, December 30. Mr. Collar said he tried to convince the commission that it was impossible to move saw-logs from the woods to the mills, manufacture them into lumber and ship the product in less than eighteen months, and that sawmill men should have two years in which to do the work.

Chairman Collar said that from the arguments the general impression was that the commission would take favorable action, but stated that the association should keep closely in touch with the conditions and that when an opinion is handed down the railroad committee, together with a traffic man, confer with the traffic committee of the Wisconsin roads and see that a new tariff is so made as to protect the lumber interests.

Mr. Collar told of a conference while in Washington with Mr. Belknap, the safety appliance expert of the Interstate Commerce Commission, in which the matter of hand brakes on log cars was brought up. Mr. Belknap informed Mr. Collar that Senator Stephenson of Wisconsin has introduced a bill to amend the law known as S-507, which new bill will provide that hand brakes are not essential on flat cars used for logging purposes.

Chairman Collar reported that the State Railroad Commission had

handed down a decision on pulpwood rate case on January 27, reducing the rates on pulpwood as follows:

For five miles, from 1.5 cents to 1.35 cents; 10 miles, 1.64 cents to 1.45 cents; 100 miles, 3.75 cents to 3.05 cents; 300 miles, 6.75 cents to 5.10 cents. Other rates will probably be proportionate.

Chairman W. A. Holt of the legislative committee had no formal report to make, but said that the lumber interests should have more attention at Madison, Wis., the state capital.

The report of the advertising committee as read by Chairman M. P. McCullough outlined the work during the year.

The advertising campaign began the first of October and replies have been far more profuse and of better character than was anticipated. Each month has shown an increase over the preceding month, thus indicating the cumulative value of good publicity. Up to the end of January the secretary received approximately 1,000 direct answers to birch and hemlock advertisements, most of which asked for either the hemlock or the birch bulletin, or both. Practically all of the inquiries came from concerns or individuals who were actually interested in purchasing or recommending either birch or hemlock. Approximately 2,000 names of lumber dealers have been furnished by members of the association to whom have been sent copies of the hemlock books, together with proper explanatory letter. Many of these dealers have asked for additional copies of the book for distribution among their customers, and have also asked for a list of the association members.

The demand for the birch books was so heavy that the original edition of 1,500 copies was exhausted and the committee took the responsibility of ordering another thousand. The amount expended to date of meeting was \$3,030.80. The committee estimated that to carry the work to the end of March would cost less than \$1,000.

The report said further that the only case in which the committee had exceeded the limits of its original estimate of the cost of the campaign was caused by a larger number of inquiries than were expected. In other words, this meant that the success was greater than the committee dared anticipate.

In conclusion, the report stated that, basing estimate upon the experience already gained, it is believed that a succeeding campaign can be made even more effective than the present one, and it recommended continuance of well placed association advertising as one of the most important means of maintaining and extending the market for products of the association.

After the appointment of committees on reports, nominations and grading, J. E. Rhodes, the newly-elected secretary and manager of the National Lumber Manufacturers' Association, addressed the meeting. He reviewed the hemlock conditions and said that conditions in the hemlock market are better than at any time in the history of the business. He recounted his recent travels and said that everywhere he had encountered the best prices, demand and general tone of trade in his memory. Mr. Rhodes said that the highest point of yellow pine production was passed in 1909, when the production was 16,000,000,000 feet, and that with the decrease which is bound to come in the ensuing years hemlock will show a corresponding strengthening. He said that great prosperity in the South will mean a local consumption of pine and hence a broadened market for hemlock in the northern points.

In speaking of his trip to Washington, D. C., on January 13, in the interest of the lumber trade, in the matter of tariff reduction, Mr. Rhodes said that there is every indication that the coming Congress will start on a one-billion-dollar basis and must retain at least a protective tariff. He said that inasmuch as lumber carries a less ad valorem rate than any other commodity—less than ten per cent—there is little likelihood of this tariff being removed or reduced. He said that he anticipated that with increase in stumpage prices the people will continuously demand a greater voice in the handling of future lumber crops. He said that lumbermen must participate in the forestry movement and co-operate with the conservation movement, or they will have to take the consequences in the matter of legislation.

J. C. Knox, secretary of the Michigan Hardwood Manufacturers' Association, talked for a few minutes and stated that conditions in Michigan and Wisconsin were very similar. He reviewed the meetings in the interests of the grading rule changes, and read figures of cut

and shipments for Michigan points. He predicted a smaller input of logs in Michigan during the ensuing winter than occurred last winter.

The meeting then adjourned until two o'clock.

The afternoon session was opened by a report of the bureau of grades submitted by M. J. Quinlan, chairman. The report stated that Rule 2 of the by-laws says that the grading rules committee has full authority to make any changes or new grading rules and that action by the association is not required. He said that at the meeting of the committee at Green Bay, December 19, the chief question proposed was that of cutting hemlock to yellow pine sizes. After a thorough canvass by mail the committee recommended that no change be made in hemlock sizes.

The No. 4 grade hemlock stock was also discussed. The report went into detail as to this new grade, which was recommended and adopted by the grading rules committee, and will henceforth be part of the hemlock grading rules of the association. Details of the new rules can be secured by writing to Secretary R. S. Kellogg.

The nominating committee then reported the recommendations for the following officers for the ensuing year:

PRESIDENT, E. A. Hamar, C. H. Worcester Lumber Company, Chassell, Mich.

VICE PRESIDENT, R. B. Goodman, Goodman Lumber Company, Goodman, Wis.

SECRETARY, R. S. Kellogg, Wausau, Wis.

TREASURER, George Foster, Foster-Latimer Lumber Company, Mellen, Wis.

DIRECTORS to take place of directors retiring: W. C. Landon, J. J. Lingle, A. R. Week and A. C. Wells.

The nominating committee reported the following for bureau of grades and information: M. J. Quinlan, M. J. Fox, C. A. Goodman, R. M. Harder, A. R. Owen and J. J. Ott.

Both officers and directors were unanimously elected.

The recommendations committee recommended, among other things, an assessment for advertising for 1913, of not to exceed one-half cent per thousand feet cut, the aggregate assessment not to be over \$4,000; any extra assessment to come from the general fund.

Among the new business, the car stake question as introduced by W. C. Landon caused considerable discussion. Mr. Landon said that two years ago the Chicago & North Western Railroad Company took off bunks and chains from all flat cars and that on new cars it is putting nothing in place of such bunks and chains for logging service. The Chicago, Milwaukee & St. Paul Railroad Company is now following a similar course.

Mr. Landon said that the question should have come up at the time these changes were started. He further said that rates on log shipments were based on specially equipped cars, and that it is not fair to force the shipper of logs to pay for his own equipment for stakes and chains. Mr. Landon said that the companies putting on their own patent stakes will eventually be forced to remove them.

The Wisconsin Industrial Commission submitted the question to the Wisconsin State Railroad Commission and the two commissions are now working out the question jointly. He said that with proper co-operation on the part of the lumbermen an order will result compelling the railroads to equip all logging cars with patent stakes.

G. H. Chapman said that in the near future all roads handling logs on cars will be forced to equip cars with permanent stakes. He said that patent stakes tipping from the off-side are dangerous and that experience has demonstrated that stakes tipping from the end are the safest.

W. C. Landon made a motion that a resolution be adopted to the effect that the industrial and railroad commissions be given every degree of support with a view of hastening the decision in behalf of log shippers.

In speaking of the new Wisconsin workmen's compensation act, R. B. Goodman suggested that the secretary get figures from the State Industrial Commission on the compensation paid out by lumbermen under this act, and that these statistics be sent out in the next bulletin.

W. C. Landon then made a motion asking for a resolution to be sent to the Wisconsin State Industrial Commission asking that an order be handed down compelling all railroads to equip their own logging cars with some safe device for releasing logs.

A further discussion of the compensation act showed that the one

bad feature is the total disability clause. One member told of an experience whereby a shingle sawyer on losing one finger was awarded damages to the extent of his total earning capacity, whereas a fair award would undoubtedly have been the difference between his earning power before the accident and after.

W. C. Landon said that the entire expense to his concern under the new act was \$500 for the past year, based on a payroll of \$187,000. The consensus of opinion was that the act with the total disability clause eliminated is very good.

A resolution was adopted to the effect that letters will be addressed to senators and representatives at Washington urging them to get action on the Stedenson bill, providing that hand brakes shall not be required on cars for logging service.

On motion, the question of extra freight charges based on weight of car stakes was referred to the railroad committee, which was instructed to try to get the roads to allow the actual weight of stakes and to stand one-half the expense of such stakes.

The meeting then adjourned.



Hardwoods on the Pacific Coast



In all the principal cities on the Pacific coast are marketed no inconsiderable quantities of hardwoods. There are dealers in hardwood lumber in Vancouver, Seattle, Tacoma, Portland, San Francisco, Los Angeles and San Diego. In some of these cities, notably in Portland and San Francisco, hardwood lumber is manufactured to quite a little extent, but taken altogether the total would not constitute an output greater than that of one big hardwood sawmill in the Mississippi valley, ranging considerably less than fifty million feet.

The sources of supply of hardwoods that are manufactured on the Pacific coast are Japanese oak from the southern portion of the northernmost island of that group and from adjacent parts of Siberia; koa wood from the Hawaiian Islands; several varieties of Philippine woods (notably the peawood variety, which passes for mahogany); and genezero or prima vera, a beautiful, brown-toned wood simulating in texture and character a laguna-striped mahogany, and some mahogany from the West coast of Mexico and Central American states.

This timber reaches the coast cities in the form of hewn sticks, usually butt cuts, and the freight is very moderate as it largely comes over as ballast. In minor quantities there are a few hardwoods of the Pacific coast region that are sawn at small mills, and find their way into the coast markets. These are made up of Oregon ash, a wood of very inferior quality; laurel or myrtle wood; Oregon oak, which in its chief utilization is in the form of oak boat knees, and in southern California a very small quantity of eucalyptus. As before noted, the total of hardwoods produced on the Pacific coast will not aggregate fifty million feet annually.

Hence, the chief sources of supply for the comparatively limited quantity of hardwoods employed for various purposes on the Pacific coast comes from Michigan, Wisconsin and lower Mississippi valley. These purchases consist largely of white and red oak, white ash, red and white birch and hard maple, and to a limited extent basswood, cherry, red gum, hickory, poplar, Circassian walnut and black walnut. No inconsiderable quantity of 3/8 and 13/16 tongued and grooved hardwood flooring is marketed on the coast, part of it being oak and part maple. There seems to be but a limited demand for jointed flooring strips either in parquetry strips or thicker stocks. The largest center of hardwood grouping and distribution on the coast is at San Francisco, where one yard carries a large stock of American and imported woods.

The general run of finishing lumber on the coast, not only in residences and low-priced buildings, but also in skyscrapers, is made from conifers growing in that region, the prevailing fashion being in finish made from Douglas fir or Port Orford cedar, and occasionally one finds a building where the interior finish is made of sugar pine or California pine.

In some classes of finished panels, elm, plain maple, birds'-eye

maple, red gum, mahogany, plain and quartered, are found, but the big trade lies in the panels with birch faces. These panels range in size from 24x60 inches to 30x72 inches, and, while the most is three-ply stock, some of it is made up in five-ply form. Altogether, about eighteen million feet of square Japanese oak finds its way into coast cities for manufacture into lumber each year, and latterly quite a quantity of this wood in the form of lumber has come across.

By no means is Japanese oak a bad wood. It bears quite a close resemblance (only being lighter in color) to chestnut oak of the East, although it has not nearly as much breaking strength or general character of toughness. The figure is small, but for ordinary purposes it is a highly satisfactory wood. While this timber reaching the coast is very low-priced, unfortunately it cannot fail to be noted that the people engaged in its manufacture apparently are making little or no money out of their business, as plain sawed firsts and seconds Japanese oak is being sold in the San Francisco market at this time in lots of a thousand feet at as low as \$68 a thousand, and in some cases at even less than this price, while one-inch No. 1 common plain is selling at the yards at \$50 per thousand and less.

Very little Japanese oak is quartered and does not constitute much of an item in the market. Such as is quartered is sold at from \$100 to \$120 a thousand for firsts and seconds in retail lots out of the yard.

It appears that in the future the Japanese will send more sawed lumber and fewer logs than in the past. Lumber which they produce as a rule is of very good quality. From the prices herewith quoted it will be noted that this sort of competition is a very serious menace to anything like values for eastern oak delivered on the coast, because the Japanese variety will be substituted wherever possible.

Where it is necessary to obtain oak of high quality in figure, or oak of good working strength, Japanese oak will not answer, and it has to be shipped from eastern points.

Next to birch in the coast cities, perhaps maple is the favorite. This is used not only in flooring, but for small timbers where strength is required. There are two or three very considerable stocks of hard maple in various coast cities.

With the growing of wealth and taste for the best there is in wood finish, it would not be remarkable to see quite an evolution in the Pacific coast hardwood demand during the next few years. The present iniquitous freight rate of 80 to 85 cents a hundred on shipments of hardwoods from the East to the Pacific coast renders the broadening of the hardwood merchandizing industry in that region very difficult, but with the opening of the Panama Canal, it may be anticipated that there will be a material lowering in the cost of shipments of eastern hardwoods to the coast, and beyond question the railroads will cut their rates to correspond quite closely with their eastbound rates, which would naturally lower the price of American hardwoods on the coast from ten to twelve dollars a thousand feet.

With this diminution in cost, and a desire on the part of Pacific coast builders to secure the best there is for interior finish purposes, and their financial ability to pay for the best, it is deemed quite certain that hardwood manufacturers can look for a considerable broadening of a market for hardwoods on the Pacific coast very shortly.

Of the finishing of various varieties of wood in the chief Pacific

coast. It must be confessed that they know how to treat woods in just as satisfactory shape as they do in the East. Wood finishers of that region are really making some very handsome work out of quite ordinary woods. There seems to be a growing taste for the use of additional quantities of red gum, and also an increased demand for mahogany and other of the finer cabinet woods.

As a general rule, the mahogany of the Pacific coast is red birch in the form of panels and "battens," which is the common name of

the finishing strips, including the parting strips between panels, casings, base, etc.

There is one thing that can be said about the Japanese oak competition. Good authorities state that there is less than 150,000,000 feet of this wood remaining in Japan, and that within five years the total stand will be exhausted. Only the butt cut of the tree goes into hewn timber for lumber production, the remainder of the tree being utilized for other purposes.



Steaming Lumber Under Pressure



Ever since lumber production became an important commercial pursuit there has been but one general system employed in seasoning wood, which has consisted in either cross-piling the lumber or piling it on stickers, and permitting nature to extract such moisture as it could under varying conditions. Such lumber as was employed for high-class purposes was then subjected to one of numberless systems of kiln-drying to fit it for eventual utilization. Latterly the lumber trade quite generally is awakening to a suspicion that a better system of lumber seasoning can be pursued, and during a recent period more than a half score of leading lumber manufacturers have installed, in connection with their plants, an apparatus for steaming lumber under pressure, in large quantities, for the purpose of preparing it for prompt and more accurate drying.

While steaming wood under pressure will not relieve it from log stain, log checks or splits, knots or shake, users of the equipment allege that there are no future defects developed in drying after the wood is subjected to this treatment. Furthermore, it is claimed that the lumber dries out to a lighter weight without checking or warping, to a uniform tone and with a minimum of shrinkage—in some instances no shrinkage at all.

Up to this date the system of steaming wood under pressure is employed by various manufacturers of red and sap gum, oak, cypress, mahogany, sycamore, maple, birch and beech, and every user of the commercial equipment, which is built to handle fifty thousand feet and upwards daily, is enthusiastic over the results attained.

The use of this apparatus has discovered to students of lumber affairs how little even the highest-class experts in the trade know about wood physics, wood structure, wood chemistry or wood diseases. It is found that nearly every variety and thickness of wood has to be treated with different steam pressure and time to attain the highest results in seasoning, and that woods of the same variety growing in different regions have to be handled slightly differently to accomplish this end.

There is nothing new in either the theory or practice of treating wood with steam, either with or without pressure, but within a recent time a commercial apparatus has been devised which renders it possible to treat wood with steam under pressure at a nominal cost and secure remarkably satisfactory seasoning results. Superficial steam applied to wood, either in a dry-kiln or without, certainly assists in the seasoning process, and contributes to the freedom with which certain classes of wood can be bent into form, but it is only with a scientific process that results desired are attainable.

The attainment desired in seasoning lumber is comparatively simple. It is generally known that all the value green wood has for lumber purposes is its fiber or cellulose, and what is being attempted in drying is to drain or evaporate the twenty-five to sixty-five per cent of the liquids or semi-liquids that are contained in the wood fiber and in the cellular structure of the wood. This liquid, made up of various constituents, including tannic acid, albumen, sugar and starch,

and other substances in solution and semi-solution, is to the extent of about one-half contained in the wood fiber itself and the other one-half is enclosed within the cells and ducts of the wood.

In ordinary practice of drying lumber, when it is put in cross-pile with the proper slope for drainage, the moisture contained in the fiber drains and evaporates quite promptly, but the water contained within the cellular structure of necessity has to evaporate through the walls of the cells before the lumber even approximates dryness.

Giving wood steam under pressure simply induces an explosion or splitting of the cell structure, and thus releases the liquid contents for prompt drainage and evaporation. Unless this steaming treatment is done on a scientific basis there are certain dangers involved in its employment, the chief one of which is giving the wood so much steam pressure and time as to pulp or injure the wood fiber, and consequently impair the strength of the lumber. Excessive steam

pressure is also likely to release to too great an extent the tannic acid contained in the wood, which undeniably contributes to the durability of the wood. An excess of steam pressure and time would also change the tone and color of the wood to an extent that might not be desirable, and carried to an extreme would vulcanize the wood, changing oak, for example, to a very dark brown tone.

On the contrary, superficial steaming without pressure may simply assist in breaking the cellular structure on the outside of the lumber, but by no possible chance can it penetrate to the center of the piece without an excess of steaming on the outside; that is, the

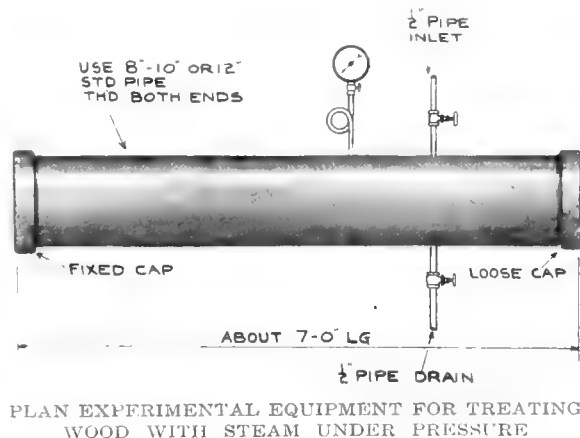
piece of lumber can not be steamed with superficial steam and obtain uniformity throughout the boards or plank. Hence, in drying this kind of lumber the quality of the outer section is impaired and the core of the board is unsteamed or insufficiently steamed, with the result that it is very difficult to season the wood without checking and often honey-combing.

As before noted, every wood of every thickness, or every thickness of every wood must be treated somewhat differently to attain the highest results in prompt and accurate seasoning.

There is a cheap and low-cost experiment which should interest every lumber manufacturer in the country, whether he be a producer of hardwoods or softwoods, that is herewith suggested and illustrated.

The equipment consists of a section of standard pipe, say eight feet long, threaded and closed with a cap at both ends. This pipe may be eight, ten or twelve inches in diameter, but the latter dimension is commended for experimental purposes. One cap should be fixed and the other left loose and removable. To this section of pipe a half-inch inlet pipe from a steam boiler should be attached, together with a gauge, and on the bottom a half-inch drainage pipe should be attached.

To carefully analyze the results attainable in prompt and accurate seasoning, it is suggested that boards of one variety and of one thickness be weighed, carefully measured and then cut in halves.



PLAN EXPERIMENTAL EQUIPMENT FOR TREATING WOOD WITH STEAM UNDER PRESSURE

One-half of these boards can be treated in the baby cylinder, and the other half left to dry as in ordinary practice, either in the air or in a kiln. This will enable the experimenter to make a comparison of the shrinkage, time for drying, staining, checking, weight, etc. It will be well to mark the weight and accurate measurement on every piece of lumber and place both the steamed and untreated lumber on sticks for drying in the open or in a kiln. In this manner the steamed pieces will be subjected to harsher conditions than if the entire pile were of treated lumber.

It is recommended in making this experiment that a steam pressure of twenty pounds be used as a basis, subjecting the wood in preliminary experiments to ten minutes at this pressure for each one-inch in thickness, i. e., ten minutes for inch lumber, fifteen minutes for one-and-a-half-inch, and twenty minutes for two-inch lumber. This scale of pressure should be a base, but the time is only approximate. What one must seek to do is to give the wood time enough under this pressure to insure the steam getting to the center of the board, but never by any possible chance to give the lumber so much time in the steam as to injure the fiber of the wood. In no case should a steam pressure of over forty pounds be attempted, as beyond this there is certainty of danger in injuring the strength of the fiber.

Whatever can be attained in the results involved in a section of twelve-inch pipe can be duplicated in a ten-foot cylinder. This is an experiment that costs but a very small amount of money, and it is thoroughly believed is worth trying out by everyone who is having the least difficulty with seasoning defects, stain, shrinkage or excess weights on lumber products.

The Forest Service, through its Madison, Wis., Forest Products Laboratory, has been making exhaustive experiments in the principles underlying drying lumber, and while those in charge have devoted more time to kiln-drying than they have to steaming wood under pressure, Harry D. Tiemann, in charge of the timber physics, alleges:

"The advantage of having the timber heated thoroughly before it goes into the kiln is that heat renders the wood more susceptible to the transmission of moisture. Since the water is evaporated from the surface only and must pass from the interior of the wood to the surface in order to be evaporated, the desirability of having the wood thoroughly warmed when the dry-kiln treatment begins is obvious. Where the wood can stand the heat without detrimental effects for the intended use, preliminary steaming, not in condensed but in live steam, is beneficial. This not only accomplishes the desired heating, but it assists in the transmission of moisture from the center also by moistening the surface if it is too dry. On the other hand, steaming temporarily softens the tissue of the wood so that it becomes more or less plastic, as is well known in the wood-bending industry. Other effects, also, are produced which to a greater or less extent change the properties of the wood. The organic materials or 'sap' in the wood are changed by 'cooking,' and apparently some undetermined chemical change takes place in the ligno-cellulose of the wood itself. This is indicated by the fact that the color of the wood is darkened, the degree of coloring depending upon the temperature and duration of the process, and that the wood, when subsequently dried, has lost some of its original weight and is less hygroscopic. The change in hygroscopicity is beneficial for some purposes, as it reduces swelling and shrinkage of the wood, but the wood is less resilient and if soaked it becomes softer than the unsteamed material and in extreme cases even 'punky.'

"The pressure and duration of steaming desirable in kiln-drying are points which have not yet been thoroughly worked out. From five minutes to twenty-four hours, or even longer, and pressures ranging from atmospheric to fifty pounds gauge have been used in practice. The higher the pressure the greater is the effect produced, and the longer the time the more thoroughly the treatment penetrates the wood. Experiments have shown that a pressure slightly above atmospheric for twenty-four hours is sufficient to slightly darken two-inch maple clear through, and a pressure of forty pounds will turn oak and probably other hardwoods almost black. Even where the strength of the wood is not the primary consideration it probably is not safe to exceed fifteen pounds gauge pressure (250 degrees F.), except for special purposes."

The writer does not fully agree with Mr. Tiemann in all the statements he makes, because repeated experiments have demonstrated that steam-treated lumber under a maximum of twenty pounds pressure and for a limited period loses none of its resilience, and in no case ever becomes "punky." There is no good reason in commercial practice to steam wood any longer than is necessary to force the steam to the center of the plank. Any steaming beyond that possesses no value and is very likely to affect the strength of the wood. There would be no good reason to leave wood in a steam tank under pressure for twenty-four hours, but certainly if this were done it would be expected that the wood would be materially darkened and the general tone deadened. Furthermore the breaking and crushing strength of the wood would be lessened, and its value deteriorated.

It is a fact that can be substantiated that steaming lumber under pressure for the proper length of time livens the tone, brightens the color, increases the resilience, greatly improves its working qualities and reduces the tendency to swell to almost nil, and even prevents "raising the grain" when the water stains or fillers are used.

H. H. G.

Supply of Paper Birch Not Decreasing

The U. S. Department of Agriculture is authority for the statement that the paper birch, often called also white birch, or canoe birch, is one of the few timber trees in this country which seem to be holding their own against ax and fire. The average citizen probably takes no particular interest in the paper birch. Yet it is doubtful if any other kind of wood on the face of the earth is found in so many households; for paper birch furnishes most of the spools made in the United States.

Maine is the chief center of spool manufacture. Its factories turn out \$60,000,000 spools yearly, chiefly birch. Few woods as hard as this can be worked with as little dulling of the tools; its principal recommendation lies in that fact. It is handsome in color, and, after the wood becomes seasoned, it shrinks and warps very little. That is an important consideration, because the delicate machinery that winds the thread would fail to work if the spool changed its shape to a perceptible degree.

The birch wood for spools must be selected and handled with care. The tree's red disk heartwood is objectionable because it will not turn smooth in the lathe, and the color is not desired. Few industries waste more wood, in proportion to the quantity used, than spool making. Heartwood, knots, and all other defects, frequently amounting to more than one-half of the tree, are rejected. From one-half to three-fourths of the remainder may go to the refuse heap in sawing the bars and turning the spools. Despite this waste the paper birch does not appear to be threatened with extinction. It is a fire tree—that is, it spreads rapidly over spaces left vacant by forest fires. The most extensive paper birch forests of Maine and New Hampshire occupy tracts which were laid bare by the great forest fires which swept the region from 1825 to 1837.

The tree is short lived. At an age when the white cedar, for example, is just beginning to lay on useful wood, the paper birch has passed its prime and is ready for decay. It is placed at still further disadvantage by being unable to compete with other trees for light and soil. It prospers when growing alone, but it gives up the fight after stronger trees begin to crowd it. Nevertheless, it is believed that more paper birch is growing in the United States today than two hundred years ago.

The Forests of Mindoro

A description of trees, forests, and forest conditions in Mindoro, one of the Philippine islands, has been prepared by Melvin L. Merritt and published at Manila by the Bureau of Forestry. It is written in a popular style and is largely free from the long lists of unpronounceable names which so often make up the chief parts of Philippine reports. It is easy reading, and an entertaining picture is presented of conditions in that remote part of the world.



Unknown Things About Wood



With all the advance in knowledge in recent times regarding wood, some things remain to be found out. Mysteries still allure the investigator and still tantalize him. For example, the most learned botanist on earth does not know why sap circulates in a tree. Men who have studied the subject know a great deal about the circulation of sap. They know the course it takes, the roads it travels, the channels through which it passes, the paths it follows, what vessels receive it, and the gateways and trap doors by which it passes from one stopping place to another; but what makes it go? Nobody can tell.

Some of the forces are named, and to that extent are known. Capillary attraction is one of them. This causes liquids to flow through minute tubes, like oil rising in a lampwick. There is little question that this force helps send the sap up a tree trunk through the pores of the wood, but it will lift a liquid only a few inches, or a foot or two at most. Its part is mighty small in lifting sap to the top of a tree a hundred feet high.

Then there is a force or process called osmosis. It is the process by which one liquid will pass through a thin membrane to mix with another of a different degree of concentration. It is supposed to have something to do with the movement of sap from one wood cell to another; but no one has yet been able to figure out how it can account for the lifting of the sap long distances, from the base to the leaves of a tree.

A third force acts in sap circulation. It is called root pressure, but just what that is, nobody knows. It lifts sap a little higher than it is raised by capillary attraction, but is totally inadequate to lift it to the top of a tree. If all three forces are added they are still insufficient to accomplish the work done in every tall tree that grows. Something else is working, but it is not known what. Some would call the unknown factor a "vital force"—something perhaps similar to the heart beat of an animal; but since nobody has ever discovered a thing of that kind in trees, the suggestion is untenable, and the ultimate cause of sap circulation remains a mystery.

There are unknown things connected with the structure of wood. They reach this side the realms of chemistry where so many mysteries exist. Microscopists say that a cubic inch of wood is more complex in its structure, more wonderful in its plan and architecture, than the largest skyscraper in the world. There are tubes, arches, pillars, doors, and galleries, fitted together and related in the most wonderful manner. The naked eye never sees the details. They are so minute that they lie beyond the range of unaided vision. All that is seen is a mass, but nothing that is of particular interest, more than a common piece of wood.

Cut off a splinter no larger than the hundred-thousandth part of a cubic inch, and place it under a compound microscope. Details spring into existence. The mysteries of wood structure are revealed—part of them. Single out one of the smallest of the hollow tubes and examine it for details. It is a cell, one of the countless billions which go to make up a tree. It is hollow, with a shell that looks like glass. In fact, it may be compared to a long, very slender bottle with the ends sealed. It may be dyed some bright color and can then be seen better.

This might be considered as the smallest element in wood structure, but it is not. It is composed of parts. By increasing the power of the microscope, concentrating intense light upon the object, and applying certain means of enlargement, the cell may be viewed in size as large as a railroad spike. It is then shown that its wall is threefold, three concentric layers. Each appears to be composed of a ribbon-like substance wound spirally. The spirals of one layer run one way, those of the next run opposite, a sort of "cross-gartering."

About there the end of human knowledge on the subject is attained. The microscope will reveal no more. Its powers have reached their limit, or seem to have done so; and the investigator is balked in his efforts to pry into the secrets of wood structure.

There is something beyond which he cannot reach. What are those spiral ribbons which constitute the cell walls composed of? Are they made up of cells so infinitesimally small that they lie as far beyond the microscope's power as the ordinary cells are beyond the power of the naked eye? No man knows. The threshold to the identity of real wood substance seems to be reached, but the door has not yet been opened by science, nor the inner mysteries revealed.

Chemistry takes up the investigation where the microscope leaves off; but chemistry tears things to pieces. It destroys structure. What men would like to know is, what is the ultimate physical structure of wood? What is the smallest component part into which it can be divided, and still be wood? The spiral bandages which lap and overlap this way and that to constitute the transparent cell wall, is evidently not the last step in subdivision of fiber before it melts, as it were, into its elements and becomes amenable only to the laws of chemistry. Imagination may reach down deeper into the mystery, but science, which deals with cold facts, here strikes an obstacle which for the present bars its further progress.

New Zealand Hardwoods Might Prove Satisfactory in America

Far-off New Zealand is the latest country to which forest experts have turned in seeking substitutes for the valuable American woods used by the furniture, cooperage, implement and similar wood-using industries.

Manufacturers in this country have been facing a constantly decreasing supply of available hardwood timber for a number of years and the time is already at hand when efforts must be made to look to the preservation of the American species most in demand and to scour foreign lands for trees which may prove valuable as substitutes.

Seven different New Zealand hardwood trees have just been put through a series of tests by the United States Forest Service in co-operation with the University of California in the timber testing laboratory at Berkeley. The trees showed up remarkably well in comparison with white oak, which is one of the strongest woods in the United States, developing under test when in an air dry condition a crushing strength of 8,500 pounds per square inch and a bending strength of 13,100 pounds per square inch.

Four of the seven New Zealand woods tested developed a bending strength even greater than white oak and three of the woods showed a greater crushing strength. The New Zealand woods found to have a bending strength as high or higher than oak were the Black Maire, Matai, Puriri, and silver pine, while the first three of these have in addition developed a greater crushing strength than oak. The figures showed that Black Maire has more than one and one-half times the bending strength of oak.

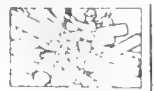
These strength tests of seven of New Zealand's most valuable timbers may prove of the greatest benefit to certain American manufacturing interests if it is found that the islands have enough of the various species to import a little to this country.

The United States will not be able to depend on imports to any great extent, for wood users realize that there is an approaching shortage of timber in other countries as well as this and each nation must cultivate and protect its own forests. It is therefore likely that planting experiments will be made with many of the valuable foreign woods.

A bill is now before the legislature of New Jersey calling for a bond issue of \$1,000,000, to be used in the purchase of 100,000 acres of idle land for a state forest. The bonding of a state for such purposes is believed by many to be a sound business proposition. The state forests now owned by New York and Pennsylvania are estimated to be worth at present from two to four times what they cost eight to fifteen years ago.



Manufacturers' Eleventh Annual



The eleventh annual meeting of the Hardwood Manufacturers' Association of the United States held at the Hotel Sinton, Cincinnati, O., February 4 and 5, resulted in a wealth of valuable information and suggestions. There were about five hundred present.

President W. E. DeLaney of Cincinnati opened the first session of the meeting Tuesday morning, February 4, by introducing C. A. Hinsch, president of the Business Men's Club of Cincinnati. Mr. Hinsch welcomed the association to the city in a very cleverly worded address, in which he diverged somewhat from the set form of such talks. In speaking of the business conditions of the country, Mr. Hinsch, who is president of the Fifty-Third National Bank of Cincinnati, said that he personally felt conservatively optimistic in regard to the future of the country. He deplored, however, the tendency toward socialism, saying that it is one of the most dangerous problems which we have to confront.

Mr. Hinsch said that big business, so-called, has come to stay and should be controlled and not destroyed, and that legislation should be passed providing for the issuance of federal charters for all companies doing an interstate business, especially those doing a volume of five million dollars or more annually. He suggested that they should be subjected to an examination by the government similar to that now being exercised over national banks, and that all securities issued by these companies should represent real values and should be passed upon by the commission for the purpose of protecting the investing public.

Mr. Hinsch touching on the tariff question said that he did not consider that the coming administration will inaugurate any rash policies in regard to tariff legislation. He based his reasoning on the fact that the national government must have a large revenue to meet its disbursements, and that for this reason, if for no other, we are a long ways from what is commonly known as free trade. This suggestion is particularly pertinent.

The speaker also suggested that a revision of the present currency system will result in greatly strengthening this country's position among the leading financial nations of the world. He said that if the Aldrich bill is not passed, we should enact a law giving to the Secretary of the Treasury, in conjunction with the Comptroller of Currency, and the President of the United States, authority to issue additional currency to national banks, when the exigency of the case requires, equal in amount to twenty-five per cent of the paid in capital of the national bank making application.

Mr. Hinsch's remarks were warmly greeted.

President DeLaney then introduced Charles F. Shields, president of the Lumbermen's Club of Cincinnati, who also extended a warm welcome to the visiting Lumbermen on behalf of the local members of the trade.

D. M. Rose of Knoxville, Tenn., was then introduced by the chair to respond to the addresses of welcome, on behalf of the association. Mr. Rose departed from the usual cut-and-dried formula of responses and talked in a humorous and highly entertaining vein, getting close to his hearers. His humorous allusions to the East Tennessee mountain section from which he hails were greeted with laughter and applause.

While Mr. Rose's speech was not in accordance with the regular form, and consisted mostly in bursts of humor, it was none the less a cordial appreciation of the hearty welcome extended by the city and the local lumbermen.

President DeLaney then read his annual address, which follows:

Address of President

The judgment of your executive board in selecting Cincinnati as the place in which to hold the eleventh annual meeting of this association is confirmed by the large and representative attendance that I have the pleasure of greeting this morning, which attendance is a compliment not only to the organization, but to your retiring chief officer as well, to whom you have given without reserve your confidence and support for the past year.

Cincinnatians as a whole have that instinct of hospitality that always makes you feel their spirit of welcome when you come, and regret when you go, and I am sure this association will always have a warm place in its heart for Cincinnati.

A year ago in accepting the presidency I promised you I would do my best, and today it is a satisfaction to feel this promise has been fulfilled, regardless of the fact that the much sought for universal inspection has not yet been accomplished.

When addressing you it is presumed that grading and inspection will be the important topic at issue, but today it is my intention to give you a few thoughts as to other matters, passing the question of inspection with the simple statement that, while there have been numerous failures among the producers of hardwoods who have pursued the policy of grading their lumber from the best side of the board, there has not, during the history of this association, been a failure of any of its members who have adhered to the principles of this organization. In passing, I desire to mention and suggest for your thought and investigation the plan of those interested in the production and distribution of hardware. In this industry there is an organization of manufacturers, one of distributors, also an organization of the retailers; each dealing with the problems affecting their particular branch of this industry. At annual periods they meet in convention, and the problems which affect their industry as a whole are threshed out. Frequently questions of importance are left to the executive committee for ultimate disposition.



W. E. DELANEY, CINCINNATI, O., RE-ELECTED PRESIDENT

The year just closed, especially the latter half, has been a very prosperous one in all lines of business, including lumber, and it is my opinion, as well as the expressed opinion of many, that the prosperous conditions which exist today are accounted for to a great extent by reason of the large crop production, and that the present prosperity will continue at least until this year's crops are considered in business calculations. With the splendid crops with which we were favored last year, exports amounted to nearly two and one-half billion dollars, and deposits in savings banks at about the four billion dollar mark, unsatisfactory business conditions in this country would have been remarkable indeed. To my mind only unnatural causes can prevent continued prosperity throughout the present year. It is true there are problems confronting us which if not rightly solved may lead to confusion, but I am firmly convinced that the people of this country will meet these problems fairly, and are more able now to intelligently solve them than ever before.

I further believe that the lumbermen will do their part toward a correct solution of those problems which effect their own line of endeavor. In making this statement, I am not blind to the fact that perhaps no other industry with the importance of lumber in the commercial world is today handled with as great waste and as little intelligence as our product.

It is my observation also that never before in the history of the industry have the lumbermen been so aroused and alive to these facts, and I venture the prediction that those who have worked so long and earnestly along intelligent lines, will soon reap the reward which is justly theirs, and realize that their efforts have borne fruit. This association undoubtedly deserves a prominent place in the rank of workers striving for more satisfactory results. The industry has been handicapped and assailed on every hand, and one thing that has effected our industry most seriously is the cry that the fast diminishing forests made absolutely essential the adoption of substitutes for lumber.

There is ample timber in this country, if properly handled, to meet the demands for generations. It is quite true that timber is becoming less plentiful, as the annual consumption, together with the waste, is exceeding the growth. Eliminate the waste, harvest our timber as other crops are harvested, and within a short time the growth will equal consumption. This is a statement which I know will be doubted by many, but observation has shown me that there are certain sections of our country in which the growth of timber, after the removal of matured trees, is simply astonishing, and in such sections the one who has that power seems to have allotted it for the growth of timber, as it appears to be adapted to no other purpose. My remarks are applicable only to the character of land that I have referred to, and not to lands where crops other than timbers can be much more profitably produced. What would be thought of the farmer who harvested his wheat before it was ripe, or six months after its maturity? The same might properly be thought of the lumberman. It is easy to belong to the majority. It requires no special ability to drift with the tide, to do as our forefathers did, but it is the constructive thinkers who seize new ideas, and who have the courage to proclaim their convictions that really count.

The effort to find a substitute for lumber for every purpose has about run its course, but the greatest effort must be made on the part of lumbermen to prevent the misuse of lumber, which in every instance promotes the introduction of a substitute. How many lumbermen are convinced that the all-steel passenger car is as necessary to the protection of life as the steel corporation through the public press is endeavoring to lead the people to believe? Is it not the theory of those best informed that the steel underframe with the wood top appeals to them as the logical conclusion, and do you not believe by proper effort the public may also be convinced? Do you think it possible that "good old wood" can be substituted in home-building by any material that will give it the same warm and homelike qualities?

I heartily recommend that you earnestly support the advertising campaign which the National Lumber Manufacturers' Association is endeavoring to promulgate. While no great harm can come from the advertising of any specific kind of wood, if a general advertising campaign is conducted against substitutes, without such campaign there will no doubt be inaugurated by the different associations independent campaigns, resulting in a fight for supremacy of one wood over the other, which should be avoided. Millions of dollars are being expended in the exploiting of substitutes for lumber, and we should meet this movement with united effort. We are combatted by public prejudice, a difficult thing to meet, and I do not think this can be overcome except by a general campaign of education and advertising. A few years ago the use of the wooden box appeared to be at an end, and it was freely predicted that with this result we would never have a market to consume all our low-grade product. Today the supply of low grade is not in excess of the demand. Great credit should be given to the National Box Classification Committee whose campaign was conducted in a remarkably intelligent and aggressive manner. I fear it is not being given the credit which it so richly deserves.

An equally intelligent campaign against other so-called substitutes, conducted by men qualified to handle it, would bring similar beneficial results. This campaign has resulted in a demand for box standardization, a matter in which the lumber producer as well as the box manufacturer is vitally interested, and if properly handled will result in much benefit to both, but a detriment if improperly looked after. I think the lumber manufacturer should lend his every assistance to the box industry to solve

this problem. We should aid in overcoming conditions which involve a hardship upon any of our customers.

Of interest is the action of the window glass industry, which recently decided to make a charge for boxes, a movement undoubtedly beneficial to lumber. All commodities should be subject to a charge for boxing. If the consumer pays this tax the interest of the shipper is in having the goods reach his customer in proper condition, and the false economy now being practiced, of attempting to furnish packing cases at the lowest possible figure, irrespective of efficiency, will, to a degree, be eliminated.

A subject which should be given attention is the probable enactment in most states of a workmen's compensation law, in order that just and proper bills may be enacted, and that all states have bills of similarity to prevent confusion. This brings to my mind the vital question of citizenship. Many of us refuse to participate in local politics, fearing revenge at the hands of the politicians. This to my mind is the height of cowardice. As property owners and citizens we should assert ourselves.

Frequent increase of lumber rates the past few months by the railroads indicates a concerted effort for a general increase of rates on lumber. Numerous rate hearings have been held before the Interstate Commerce Commission, and in almost if not every instance, the railroads have been represented by a battery of attorneys who put witnesses through a severe mill. The railroads appear to be united, and are much better organized than are the lumbermen. I fear that it is an unorganized movement against a well drilled organization, with prospects of the usual result. A thorough investigation of this subject will show that lumber as a commodity is at present paying higher rates of freight than its just proportion. I would recommend a uniting of our forces and the employment of experts to investigate and properly present our case before the Interstate Commerce Commission. We boast of our railroad systems, yet they kill more people in the year than all the railroads of Europe combined. One of the oldest eastern roads in America constructed at small expense, running through the most thickly populated district of the country, has had a most appalling list of accidents in the past few years, caused or aggravated by careless methods and obsolete rolling stock. Casual outsiders complain that it is almost impossible to operate railroads at a profit. This is mere rubbish. In spite of bad management, and in spite of high cost of labor, the road just referred to, can and does earn more than ten per cent of its real valuation today, but its earnings have been watered down, and its finances crippled by the purchase of competing trolley lines at double their true value.

We have and are now passing through demand of the public for government investigation of all lines of trade. No member of this organization need fear any violation of the law on our part. We are not only keeping within the letter, but within the spirit of all government restrictions. With the high cost of timber, and increased cost of production, this organization is dealing with a condition and not a theory. Prior to its existence a profitable hardwood lumber operation was almost unknown. It was a business of hard work and no profits. It was difficult for many to even get the comforts, to say nothing of the luxuries of life. The banks of the country classed the industry as an undesirable risk. Timber was bought very cheap, labor was plentiful and wages low, but the only profits we received were on paper. It was easy to figure out how much profit we should make, but actual results never equalled our paper expectations. A small body of men determined that these conditions were not right, and should be changed. It was a hard fight, not yet finished, but the ground gained will never be lost, and we are still striving, not for more than our just dues, but for what we are legitimately entitled to. The principles of this organization are correct, and deserve the same support from every manufacturer of hardwood lumber as is given to any other department of his business.

One word on the marketing of our product. Let us thoroughly grind into our sales department that their duty is to sell the product that the logs produce when handled to their best advantage, and they are to seek customers whose requirements demand the product of manufacturing plants which handle their product as indicated.

It is a great achievement, in these days of big business, to be a representative concern in any line. Such a reputation is extremely hard to acquire, and equally difficult to maintain. I urge every member of this organization to give the greatest care to the production of his lumber by properly manufacturing, curing and shipping his stock, and this, coupled with the policy of our organization to give to all the fairest, squarest treatment possible, will result in this organization maintaining the dominant position it now holds in the lumber trade.

I thank you for the generous co-operation given me throughout the year, and bespeak for my successor the same cordial treatment. I shall always cherish my association with the officers and members of this organization, to whose call I shall at all times gladly respond.

Secretary Doster read the treasurer's report, which showed the following statement:

Cash on hand January 31, 1912.....	\$ 2,028.80	
Cash receipts for year ending January 31, 1913...	32,670.62	
		\$34,699.42
Disbursements, same period.....		32,373.51
		\$ 2,325.91
Cash on hand January 31, 1913.....		
Cash in bank.....	\$ 2,323.98	
Petty cash.....	1.93	
		\$2,325.91

Secretary Doster then delivered his annual address. In speaking of the bureau of grades he said that the number of men has been reduced owing to the reduction in the number of complaints during 1912. He said further that the inspectors had been so located as to insure quick service at any place where complaints arise.

The aggregate amount of lumber on which complaints were registered was 4,133,137 feet in 1912; 6,215,908 feet in 1911, and 6,324,127 feet in 1910.

The secretary attributed this lessening in the amount of rejects to improve business conditions and the system employed by the inspectors, which gives the purchaser the opportunity of studying the proper methods of applying the grading rules. He also said that a closer study of the grading rules by the purchasing element has a tendency to reduce the number of complaints.

The secretary reported that the system of mill inspections employed during the past year has instilled a considerable feeling of confidence among the members, and that as a result they feel that they are preparing and loading their lumber out properly and uniformly. This system consists of a series of visits by inspectors who make suggestions as to standardizing methods of grading.

The secretary referred to the subdivisions among the membership that were put into effect during 1912. The following classes were established:

- CLASS 1: Oak construction and car material.
- CLASS 2: Wholesale poplar planing mills.
- CLASS 3: Poplar, chestnut, basswood and buckeye.
- CLASS 4: Gum and cottonwood, rough and dressed.
- CLASS 5: Ash, cherry, walnut, butternut, beech, birch, maple, elm and sycamore.
- CLASS 6: Chair furniture and vehicle dimension.
- CLASS 7: Mahogany.

These divisions reported at various times during the year on stocks on hand and general conditions regarding the various woods. The first book embodying a compilation of these reports was issued in July, and the second in October. Since then three supplements have been published.

The secretary spoke of the canvass on the part of the association for specific and private information covering credit features of the consuming trade not shown in the ordinary credit rating book. He said this information is held absolutely confidential, and that the source is in no instance divulged, but that the members are enabled to get close and intimate knowledge of consuming factories through this means, which they could not possibly obtain in any other way.

The report spoke of work now being done through the secretary's office with a view to compiling information and statistics as to comparative stocks on hand and values January 1, 1912, compared with January 1, 1913. The report forms will show the rough stock column in feet, and the average value January, 1913, and the same columns for January, 1912. The items will be subdivided into the standard grades. These statistics could not be gathered in time for the annual meeting, and it is hoped that the members will give the matter their early attention so that the information can be issued in the near future.

In touching on the sales code question the report said that various members are using on their quotation forms and on their letterheads, immediately under the salutation, the following:

"All quotations and contracts are made subject to the sales code and inspection rules of the Hardwood Manufacturers' Association of the United States now in effect, copy of which will be furnished on application."

This method has been decided to be the simplest and the strongest to pursue, and avoids unnecessary complications which arise from time to time without some such provision.

The report referred to the question of arbitration and then told of the meetings of the executive board.

In speaking of workmen's compensation laws and legislation to prevent accidents in industrial plants, Secretary Doster commended the work being done by the National Association of Manufacturers with a view to securing uniform legislation on these subjects. He suggested that every hardwood manufacturer could profitably lend his support to this movement.

The report said that there has been a substantial increase in the membership of the association during this year. He said further that at the end of 1911 the estimated total acreage owned by the membership was 5,207,000; the estimated increase during the year was 420,000 acres. Of the total, 200,000 acres were cut during the year, leaving a net increase of 200,000 acres.

The report then referred to the publicity department and financial condition of the association.

In speaking of the general conditions of the country, Secretary Doster said that in his travels over the various hardwood states he had found that more manufacturers are now maintaining their offices at their mills. There has also been an apparent increase in the number of transfers of large timber areas. This insures larger operations and hence more up-to-date machinery, and a better line of production. It will also result in a closer utilization. The further result of this change will be closer interest in association work, because of the fact that the larger the interest and consequent investment, the greater interest will be felt in the development of any work that will result in information bearing on the business.

In closing Secretary Doster thanked the members for their co-operation in the matter of gathering statistics, and further for their assistance in helping to promote the welfare of the association.

The chair then appointed a committee on officers' reports, which included W. A. Gilchrist, A. P. Steele and C. L. Harrison.

The meeting then adjourned until the afternoon.

AFTERNOON SESSION

The afternoon session was opened by John A. Smith of the Smith Sash & Door Company of Rochester, N. Y., who talked on the subject of "Waste of Material, or Lumber from the Sawmill to the Consumer."

As suggested by the title, Mr. Smith's talk went into details covering possible waste and closer utilization of forest products both in the matter of utilizing waste and of preventing it by cutting lumber more closely to meet the consumer's requirements.

The speaker said that of all hardwood lumber used in house work and furnishing seventy-five per cent goes into millwork, twenty-three per cent into furniture and two per cent into picture frames. He said that the greatest waste is found in the manufacture of millwork.

While Mr. Smith's suggestion that logs should be cut into sixteen-foot lengths aroused considerable interest among the membership, the suggestion was not deemed highly practical.

He further suggested that lumber should be piled according to widths and lengths, but in making this suggestion it would seem that he overlooked the enormous amount of space it would take to sort out the cut of the average hardwood mill in this way. If it could be done it would undoubtedly result in a great service to the consuming trade, but the difficulty would be in realizing a sufficient premium on such sorted stock to return a profit on the additional investment. It may be that this will ultimately become the general method of piling hardwood lumber, but it is hardly probable according to the sentiment as expressed by the members that this condition will be realized for some little time to come.

The speaker then referred to the facilities offered by the manufacturer of hemlock who has his lumber (which is probably one of the cheapest in the market) cut in lengths and sizes desired. As pointed out by several members, however, he entirely overlooked the fact that hemlock is sold to a large extent as bill stuff, while hardwood on the other hand goes into a very different line of consumption, and cutting into stocks of special lengths and widths is entirely impracticable.

The speaker said that seventy-five per cent more hardwood goes into the manufacture of houses than forty years ago. He further said that over eighty per cent of the hardwood lumber that the millman uses has to be cut seven feet or more in length. He then outlined an example showing the sizes and dimensions of the various pieces of lumber going into certain lines of manufacture. The idea of this suggestion was that sixteen-foot lengths could be more profitably employed than the twelve or fourteen-foot lengths commonly offered.

The speaker made one point which undoubtedly is based on fact and that is that familiarity on the part of the sawmill operator with the waste daily resulting from his lumber production breeds the pro-

verbal contempt for such waste. In other words, the outsider coming in from time to time could more fully appreciate the enormity of such waste than the manufacturer who is constantly in touch with it. The speaker pointed out that while efforts are being made to insure closer utilization still there is an enormous amount of unnecessary waste of forest products, which can be prevented only by a general adoption of such methods as will insure closer cutting of material to meet requirements, and also the adoption of the manufacture of certain articles to utilize further the smaller cuttings resulting from the manufacture of ordinary lumber.

Mr. Smith instanced his own experience showing that until he analyzed closely the question of mill waste he made very little money, but that now he is utilizing everything. He says that he makes one hundred doors a day, and that they are all made from firewood; namely, pieces as small as one inch thick by one-and-a-half inches wide, and as small as three inches long. He did not elucidate as to the exact process of getting at this result.

Secretary Doster then read a letter from W. S. Whiting of Asheville, N. C. Mr. Whiting said that having been convinced for some time that a great loss is being incurred by turning out hardwood stock that does not go into lath, his company determined to construct a mill at which it could utilize the waste at a reasonable cost. The plans as finally drafted involved the following features:

The mill was built to make a run on chestnut logs a half day at a time. Chestnut hog dust is delivered to the carrier containing the chestnut sawdust, and thus the entire product of the chestnut log outside of the lumber is delivered into a car without handling and sold to an extract plant. About four cars of this refuse is made by a 60,000 feet capacity mill in ten hours' work. The chestnut shavings were sold in the same way by having individual pipes put into the planing mill to deliver the shavings into the car.

The third suggestion involved the following units employed in the dimension room: One long sorting chain in back of the slab slasher; one long delivery chain parallel with the slab chain; one lath mill outfit and hog in each end of the room, and in the center; one slab resaw; one boxboard edger; one band rip saw; two cut-off saws. The letter stated that in one month when the lumber cut was 1,800,000 feet the mill turned out approximately 200,000 feet of dimension stock made up of lath, inch oak 1x3—12 and 48 inches long; inch poplar, basswood and chestnut shorts of any width and 12 to 48 inches long.

The letter stated that the company employed a man conversant with the dimension manufacture and market to look after this end of the business, but that it soon found it was making stock that was hard to market. It was further found that it was accepting orders that it could not fill because of accepting too many of one kind.

This difficulty suggested the idea of enlarging the field and going at it a little differently.

Secretary Doster, according to the letter, suggested that the association might co-operate, with a view to securing a better knowledge of the dimension market; more mills to cut out the stock, and an instructor or superintendent to oversee and check up the entire field. This suggested, according to the letter, a department of the association to carry out the following work:

To investigate the dimension market and secure schedules of material used by different manufacturers; to line up the manufacturing members and ascertain those who would come in on a plan to stand behind the department in its efforts to solve the question; to distribute the orders among the different members and let the department act as a sales department, and to employ one or two good men acquainted with the dimension business to supervise the work at the different mills; keep a line on stock, manufacturing methods, etc.

In order to arrive at this result it would be necessary to secure knowledge of what the product of the dimension mills is best adapted to; where to market it, and at what price; also to provide adequate means to get out stock to meet the demands.

Such a plan carried out by the association would be instrumental in standardizing a large percentage of the dimension material cut, and in that way the mills could be working on dimension stock that already had a sale.

A further advantage would be the fact that a considerable number of mills could work to better advantage than a few, because under present conditions orders can not be accepted at times because of limited capacity.

The letter strongly recommended that the association take up this proposition in a serious way as a step that would materially improve conditions among the manufacturers making up its membership.

J. K. Williams of the Williams Lumber Company, Fayetteville, Tenn., read a paper, entitled "The Co-operative Spirit." This paper appears without comment in another part of this issue of *HARDWOOD RECORD*.

J. E. Rhodes, recently elected secretary and manager of the National Lumber Manufacturers' Association, addressed the convention. Mr. Rhodes told of the work being done by the Blue Book published by the National Lumber Manufacturers' Credit Corporation, with headquarters at St. Louis. This is a corporation subsidiary to Mr. Rhodes' association. The speaker said that while the Blue Book is approximately on a revenue producing basis, it needs the support of the entire manufacturing element of the country in order to put it on a proper footing. He asked that members of the association be not backward in giving information to the Blue Book authorities as to credits. The terms of the book involve two issues yearly and sixty special reports, which cost a total of fifty dollars. He said further that he has been authorized to make the offer to subscribers of ten dollars for every new subscription turned in.

In speaking of the proposed advertising campaign to be carried on by the National association, Mr. Rhodes said that up-to-date insufficient contributions have been received to inaugurate the campaign on the proper basis, but he added that there was every reason to believe that in the not far-distant future a sufficient sum will have been obtained to carry on the work, and that it would eventually be made the chief feature of the association's efforts.

Mr. Rhodes said that in considering the proposed forest products exposition, it has occurred to him that it would be a good idea to have such an exposition on a permanent basis to be moved from city to city. The exposition could be carried on along the same lines suggested originally. He stated further that such an endeavor could undoubtedly be financed more easily than the general advertising campaign proposed, and that with it as a starter would undoubtedly eventually come the general advertising of lumber.

Mr. Rhodes told of the field of effort for the National association, and said that in no way would it conflict with the thirteen affiliated organizations. His association can only take up questions of a general character. He said that he is in hopes of securing from the affiliated organizations regular statistical reports on cut and shipments of each. In speaking of lumber classification and freight rates Mr. Rhodes reviewed the Los Angeles hearing, which he said brought out a vast amount of evidence on the part of the railroads, who are distinctly aligned with the lumbermen before the Interstate Commerce Commission in an effort to secure a better classification for goods packed in wood containers than for goods packed in fiber containers. The case has been scheduled to come up in Chicago on February 27.

Mr. Rhodes stated that with the gradual decrease in the amount of standing timber and corresponding increase in stumpage values, it is absolutely imperative that lumbermen turn their attention to matters of conservation. He said that the nation-wide clamor of conservation of National resources will ultimately redound to the detriment of the stumpage owner in the matter of legislation forced by public sentiment, if such owner does not himself inaugurate some plan of providing for a perpetual source of supply for woods products.

The speaker then made observations on the sentiment he had encountered during the last three months on his various trips carrying him in all parts of the country. He said that everywhere he encountered the most satisfactory reports on present trade and prospects that he had ever heard. In closing he pleaded for co-operation on the part of the Hardwood Manufacturers' Association with his organization.

President DeLaney then appointed the various standing committees, and the session adjourned for the day.

WEDNESDAY MORNING SESSION

The session of Wednesday morning opened with reports from some of the committees on the different woods manufactured by the association members. Most of these committees were not ready to report. It was shown that the demand for chair and furniture dimension is strong. It was also shown that low grades are excessively scarce in practically all grades, and prices are firm.

Foster V. Smith of Indianapolis read a paper on "Insurance." Mr. Smith said that the annual destruction of property by fire alone in this country has been estimated at from a quarter to a half billion dollars. He said that the country is thus so much poorer and that each one of us in one way or another must and does pay a portion of this loss. The burden is justly distributed among property owners by the payment of insurance premiums and indirectly passes onto the people, as a whole, through prices.

The speaker said that few subjects are of more importance to the lumberman than insurance against the hazard of his business. He raised the question as to whether insurance fully accomplished its purpose, and further said that there is vastly more to insurance than the mere policy. He said that in placing an insurance contract there are three matters of importance to be considered: The ability of the insurance company to perform; the provision of the contract or policy offered; the consideration asked for, or as generally termed, "the rate." He said that policyholders seldom look into these questions, and that the average man taking out insurance merely signs up the agreement to pay so much without really understanding what he is getting in return. He said that it was the duty of the lumberman to study the hazard side of his business, and use all reasonable means to reduce it.

In speaking of the average insurance policy, the speaker said that the provisions of the contract usually receive little actual study at the hands of the policyholder. He said that one risk is as different from another as one individual from another, and that the fire insurance contract, to properly cover the property and duly provide for existing hazards, must be drafted with the particular risk in view. He urged each member to read the printed conditions on the standard fire insurance policy carefully and to note the conditions and restrictions it imposes, and then to ascertain if the hazards are met and the property duly covered.

The paper said that a closer application to the matter of insurance would result not only in a direct saving of considerable money to the policycarrier, but that it would absolutely guarantee to him that in event of fire the insurance would be fully and satisfactorily taken care of. He further said that no man knows when fire will take place, and he should consider his insurance with the idea that his property is liable to burn the following day.

The speaker advocated that if the manufacturer himself is unable to give the matter his personal attention, he should detail someone to make a close study of the question and keep it under his personal supervision.

Secretary Doster read a letter of greeting from the Lumbermen's Club of St. Louis, addressed to the Hardwood Manufacturers' Association.

Frank A. Nurre of Cincinnati reviewed the terms of the proposed workmen's compensation law of Ohio. He stated that while this law applies only to Ohio manufacturers, its provisions are fairly typical of the compensation laws in force in the various states. It provides that every employer of five or more men must insure with the State Insurance Commission, and if he does not take advantage of the act he loses his three defenses in case of accident to any employee. The speaker said that under the act each employer is compelled to pay a semi-annual premium determined by the state insurance board, and that those not paying this premium are liable for any injury to employees. The act as it reads means that the employer must come under it, and that if he does not pay the assessment his case in the event of injury to any of his employees is practically hopeless. The act further provides that any employee hurt by wilful act of employer in the matter of not providing proper safety appliances, can sue either in the civil court or secure compensation to the extent provided by the act.

Discussion of the talk showed a varying opinion among the members

as to the ability of the various state insurance acts to cover the question in an equitable manner. It was noticeable that those members expressing themselves as favorable to the act referred to are not residents of Ohio, while the expression of opinion from the Ohio manufacturers was rather against the proposed measure.

The chair then appointed a nominating committee as follows: A. P. Steele, A. E. Norman and F. A. Kirby.

The committee on officers' reports recommended that the present standing committees of the association meet for the purpose of taking up statistical work with special reference to stock on hand, market conditions and other matters of importance affecting hardwood lumber in the various sections of the producing territory, and that the members of these committees be selected as nearly as possible from the representative producing sections, and with particular reference to the specific hardwoods produced. The report further suggested that in the event of any vacancies occurring on the committees, the president has the right to appoint successors.

The report further recommended standing committees on arbitration, transportation, freight rates, standard weights of lumber and logs, executive grading commission, cost of manufacture, sales code, utilization of waste, insurance matters, legislation and freight legislation.

Committees on resolutions and nominations were further recommended.

The committee commended the reports of the president, secretary and treasurer and recommended their adoption.

R. H. Vansant moved that the committees on the various kinds of woods make a written report to the secretary at as early a date as possible in order that information covering market conditions and stocks of the various woods may be compiled in the next bulletin issued from the secretary's office.

The motion was carried.

H. E. Sumner of the Sumner Lumber Company, New York, delivered an address, entitled "Personality in Selling." This appears as a special article in another section of this issue of HARDWOOD RECORD.

The report of the committee on resolutions expressed the appreciation of the association as a body for the warm welcome extended by the local trade and by the city of Cincinnati. It expressed appreciation also of the addresses delivered by various men, the excellent service afforded by the Hotel Sinton, and the generosity of Henry Disston & Sons, Inc., who contributed the badges to the association.

Then followed other resolutions, which are shown herewith:

THE GOVERNMENT FORESTRY SERVICE

RESOLVED, That this association approve in a general way the past accomplishments of the Federal Forestry Service of the Department of Agriculture. While there may have been occasional mistakes of policy in administration, the good accomplished has far outweighed them and we strongly disapprove any effort to distribute the national forests among the various states. We believe that the forestry policy of the nation should be handled as a unit, and that the various states should individually co-operate in forestry matters within their present domain of jurisdiction, in which there is ample opportunity for greater work than any state has yet accomplished.

ORGANIZED SYSTEM IN ELIMINATING FOREST WASTE

RESOLVED, That this convention heartily approve the suggestions contained in the communication from W. S. Whiting of the Whiting Lumber Company, Asheville, N. C., that a system be organized whereby various items of dimension manufactured from waste at individual mills may be accumulated in order to fill orders which otherwise could not be handled by any one mill without prohibitive amount of delay, and we recommend to the incoming officers of the association that the matter of perfecting a plan of this sort along Mr. Whiting's very clear and detailed suggestions be given careful consideration, and that the convention authorize the incoming president to appoint a special committee on this subject if it is believed that the matter can be most practically handled in this way.

CHESTNUT TREE BLIGHT

RESOLVED, That this association heartily approve of the work being done by the Federal Forest Service in the fight against insect devastation of trees which does more damage annually than fire, and particularly the organized effort to control the chestnut tree blight, and this association pledges its hearty co-operation in every possible way in this matter.

FOREST PRODUCTS EXHIBITION

WHEREAS, We believe that great good to the lumber industry of the United States will come from the advertising of forest products, with the object of educating the public to the fact that lumber is obtainable in sufficient quantities for all uses for which it is adapted, and with the hopes that a comprehensive campaign may result therefrom, be it therefore

RESOLVED, That we hereby endorse the suggestion of an exposition of forest products to be held under the jurisdiction of the National Lumber Manufacturers' Association, financed and managed in such a way as the National association may deem best.

The meeting then adjourned until the afternoon.

The only business transacted in the afternoon session was the report of the nominating committee. The following new officers and members of the executive board were suggested by the committee and were duly elected by the association:

PRESIDENT, W. E. DeLaney, Cincinnati, O.
FIRST VICE-PRESIDENT, J. H. Himmelberger, Cape Girardeau, Mo.
SECOND VICE-PRESIDENT, B. B. Burns, Huntington, W. Va.
TREASURER, C. M. Crawford, Coal Grove, O.

EXECUTIVE BOARD

W. E. DeLaney, Kentucky Lumber Company, Cincinnati, O.
J. H. Himmelberger, Himmelberger-Harrison Lumber Company, Cape Girardeau, Mo.

B. B. Burns, C. L. Ritter Lumber Company, Huntington, W. Va.
C. M. Crawford, Yellow Poplar Lumber Company, Coal Grove, O.
W. B. Burke, Lamb-Fish Lumber Company, Charleston, Miss.
R. M. Carrier, Carrier Lumber & Manufacturing Company, Sardis, Miss.
Clinton Crane, C. Crane & Co., Cincinnati, O.
W. H. Dawkins, W. H. Dawkins Lumber Company, Ashland, Ky.
Frank F. Fee, Fee-Crayton Hardwood Lumber Company, Dermott, Ark.
W. A. Gilchrist, Three States Lumber Company, Memphis, Tenn.
E. A. Lang, Paepcke-Leicht Lumber Company, Chicago, Ill.
J. W. Oakford, Cherry River Boom & Lumber Company, Scranton, Pa.
A. B. Ransom, John B. Ransom & Co., Nashville, Tenn.
W. B. Townsend, Little River Lumber Company, Townsend, Tenn.
R. H. Vansant, Vansant Kitchen & Co., Ashland, Ky.
E. M. Vestal, Vestal Lumber & Manufacturing Company, Knoxville, Tenn.
E. B. Norman, Norman Lumber Company, Louisville, Ky.
E. C. Robinson, Mowbray & Robinson Company, Cincinnati, O.
W. M. Ritter, W. M. Ritter Lumber Company, Columbus, O.

ENTERTAINMENT

The customary banquet usually given at the Hotel Sinton was dispensed with, and in its place a simpler and more enjoyable function in the shape of a beefsteak dinner was tendered to the visiting lumbermen by the Cincinnati Lumbermen's Club at the Business Men's Club on Monday evening, February 3. There were about one hundred out-of-town lumbermen in attendance, including the officers and most of the executive board.

Personality and Salesmanship

Editor's Note

The following paper was read by Herbert E. Sumner of New York, N. Y., at the annual meeting of the Hardwood Manufacturers' Association of the United States at Cincinnati, February 5, 1913.

One of the best known lumbermen, retiring from active business, stated, "I have plenty of money now, but never want to see the game again. Although I had an established business left me, the lumber game in the twenty years of my experience was the hardest and most nerve-racking imaginable. There was so much competition from concerns which did not understand a thing of costs and which were doing business on practically no profit, fooling themselves as to the figures, that when we reckoned up finally, we found that we had only made a fair percentage. These concerns wouldn't last long, but the trouble was as they failed, up would bob another and then it was the same old story again. Fight, fight, fight for business, all the time, my hair is gray and I am tired. I have enough to live on and I am done."

One by one you note the dropping off of first this wholesaler and that retailer, either retiring, failing, and, once in a while, a few concerns merging; but the gradual falling off of the number of concerns tells the story all the time. It can be summed up in a few words.

Lumbermen are only lumbermen; they are not merchants. To illustrate this I will tell a little story: I was talking to the buyer of one of the largest furniture manufacturers in the East, who wished to place an order for a year's business on oak dimension stock. He gave me the sizes and then I started to figure the cost of getting it out, using No. 2 common oak, allowing for waste, percentage of cutting, cost of manufacturing, freight, etc. When he saw the careful figuring I was doing, he broke in with, "That's enough; you're one of those lumbermen that understand too much about the cost of things. I will bet you want about \$45 or \$50 a thousand for stock." "Well," said I, "isn't it worth that or even more to you? You could not buy absolutely clear lumber for even \$45 or \$50 a thousand, yet I am going to figure on giving you stock already cut to size and clear, so that you merely have to assemble it."

"Guess you are right, but we cannot do business with you. I know at least three concerns that will furnish it for \$32 a thousand and who will be glad to get it."

"But they don't know their costs," I ventured.

"That's not my business, but to tell the truth, I am dead certain that they lose money on every shipment. Don't you suppose if

I could get it out here in my own plant at any such price as they quote, or even a less price, that I would do it? But I can save over \$20 a thousand feet in buying from those concerns."

Of course that is only one part of the lumber game; you can see what I am driving at. You really cannot blame buyers for getting their stock from men who don't know their costs. This is a true illustration and you can see the same thing almost any time.

The hardest competition the wholesaler runs up against is that of the large manufacturer who maintains a sales force in the different large centers. There are of course exceptions to the rule, but in the main the men in charge of these offices have no more right to be in their position than a switchman has a right to drive a "limited." It seems without exception that the larger the concern the more imperfect and ungeneral-like the man in charge. He always carries an imperialistic manner with him. In my experience I claim that as this faculty is made the most of, just so a man gets weak in another. I call that theory "balance." We men who have studied the scientific selling game are somewhat of psychologists, or, in others words, readers of human nature, but sometimes we forget that the man who buys from us is just as much a reader of human nature and in many cases a better one than we are ourselves. To illustrate. One of these managers in our vicinity got into an argument in regard to salesmanship, prices, etc. In part he said, "There is no personality in salesmanship—it is a cold, hard proposition of dollars and cents. Your No. 1 common oak, for instance, isn't as good as mine, so you can't get the price for it. Again, we are big manufacturers and you are wholesalers. You cannot name a single instance where you can dispute my theory."

"What do you get from So and So for your No. 1 common oak?" I asked.

"\$41.50 delivered and it's the market price," he answered.

"Well," I fired back at him, "you claim that my grade is inferior to yours and for all I know it may be, but nevertheless, I get \$42 for it. Now you claim there is no personality in salesmanship."

"Yes," chimed in another salesman for a wholesaler, "and we get \$43 from the same man and for the same stock."

This is the type of salesman that creates the break in market

prices. I think personality is one of the greatest assets of a salesman in any business. Personality itself is the means of getting many orders at even prices, and in some cases the man who is liked gets the order at a higher price because they have faith in him, and where faith is shown it is simply a stronger bond that has been welded by the man's personality.

There are too many lumbermen, but there are very few lumber merchants. What does it cost you per thousand to sell lumber? How many can tell?—perhaps one out of a hundred really can. What does it cost you per salesman to sell lumber? I bet not one out of five hundred lumbermen can answer that correctly. What does it cost any particular salesman to sell lumber? What does it cost to dictate and write a letter? I don't think one in a thousand can answer that last question correctly. Understand, I say lumbermen, because of course there are cost accountants and men in other lines of business who know how to figure costs. Lumbermen are as a class, in relation to their commodity, the poorest business men of today; yet the lumber business ranks fourth in the country and it ought to be a science.

We ought to import a few advertising men into the lumber business. They are the boys that get at the facts. Any advertising man turned loose in your own mill or yard will dig up more real, salient, selling points about your own business than you or your salesmen ever knew existed, because that is one of the first principles of advertising, and the next one is to see whether the manufacturer knows his costs and whether he is producing his product on a scientific basis. Besides discovering new selling points, creating new markets, overcoming criticisms and objections that are continually fired at them, they can think up appropriate replies and arguments for the product before they ever hear of objections or criticisms. In fact, they figure in advance, so to speak. Advertising men are real merchants, because they have to be.

I learned the lumber game from experience and I have had some years at it. But about three years ago I discovered the possibilities of advertising and especially in general and mail order work. I think I can say that I was of the usual type of lumberman at first, but advertising has taught me real merchandising and salesmanship. One of the first principles of salesmanship is to have the manufacturing end of the game down to perfection and know what the real cost is, in order that in the case of a high price (if it is high) you can think out the real selling points in connection with it and see where the value comes in. Study of the costs teaches a man the proper worth of the stock and enables him to sell so as to make the proper margin of profit. Now, for example, would you sell a car of 3 inch oak, that you had had on hand for two years, at the same price as a car of 3 inch that you had had on hand but six months? If you do you are a poor merchant. That old stock is worth twelve months' interest at 4 to 6 per cent added on the price of your six months old stock. Is not old stock of more value? Surely you can find consumers who want dry stock and who are perfectly willing to pay the price. Yet I know of concerns that do not recognize the difference and sell at the same price.

There are some wholesale dealers who take orders at little or nothing in the way of profit to keep the trade, and excuse themselves by saying that they make it up on other orders. Wouldn't you or I be pleased, if we were consumers, to know that we pay these dealers a little more for our lumber in order to help them give lumber to others at cost or less? Common sense should tell a man, even though he has no ideas of merchandising, that every shipment should show a profit. We eliminate from this, however, the refused car. I have said that every shipment should show a standard profit but I do not see any objection to making more than usual when you can.

Have you ever looked over a list of customers of any wholesale concern that failed? If you have not, do so; it will cause you considerable surprise. I have examined two lists of recent failures in one of our largest cities. In both cases the customers were of the poorest class of trade—all lengthy time takers and concerns who are constantly sending out complaints. Now any merchant who understands his business will tell you that it costs exactly the same to sell the best class of trade as it does the poorer class

of concerns. Another thing, the larger the concern the more stock it uses. If it is a question of salesmanship, isn't it just as easy to sell a large concern as it is a small one? That is the way I reasoned it out in my several years of experience. I know for a fact that my sales' cost is less than that of any other wholesale dealer. Furthermore, I know exactly what percentage I have to make in order to pay dividends. Now, on the other hand, right in our own city, I know wholesale concerns handling stock at 50 cents a thousand feet and I know further that there are wholesalers selling some pine and some hardwood at a profit of 25 cents per thousand feet. I would not think so much of it if they were commission men, but they actually handle the accounts through their books and in most cases have to pay the mills cash and their customers take three or four months' time. These are the men who go under sooner or later, but while they last they are destructive characters.

In closing, and as a contrast, I would like to explain my concern's new method of selling one of our American woods. We have always been firm in our belief of this particular wood and have pushed the sales by scientific advertising and also service in showing our customers how to kiln-dry, finish and take care of the wood in general. Our success has been marked, and I think a record of it has already been published. Since the first of 1913, however, we have adopted a new policy. For example, in answering an inquiry we reply that we have the stock on hand (and as we have enormous production, we nearly always have) but that we do not care to submit prices in competition with any other concern. We add that as our grades are from five to ten per cent higher in grade than ordinary stock and inasmuch as each car is shipped to fill the customer's individual requirements (such as stock for long rippings or short cuttings), we claim he can get more out of it, and for these reasons a comparison of prices is not fair or just. We shall be glad, we tell him, to demonstrate these facts by a sample shipment. This new policy had been in effect for only one day before our first order came in. We had taken it up with this man by telephone. The letter he sent in with the order stated he knew for a fact that our price was \$4.00 per thousand higher than the highest price he had ever heard of, but that he was confident that our stock would be as represented.

Shipping the stock this way is building for us a reputation and building a future. This is good merchandising, good policy and already it has demonstrated its practicability.

Exports and Imports for December

Advance sheets showing imports and exports for December, 1912, as issued by the Department of Commerce and Labor at Washington, show that exports of all wood and manufactures of wood aggregated \$8,503,196 during the month. This is compared to an export value December, 1911, of \$7,074,254, which is a distinctly favorable showing, considering the ocean freight rate situation.

The total export of logs and other round timber showed a gain from \$252,130 in December, 1911, to \$297,319 December, 1912. The total hewn and sawed timber exported gained from \$559,134 December, 1911, to \$895,575 December, 1912.

The total export value of manufactured lumber in the form of boards, planks, deals, joists, scantling, etc., was \$3,841,407 December, 1911, and \$4,683,188 December, 1912.

The total import value of wood and manufactures of wood aggregated \$5,044,786 December, 1911. The import value of mahogany increased from \$228,453 December, 1911, to \$709,131 December, 1912. There was a corresponding increase in the importation of other cabinet woods. The importation of pulp woods decreased in value from \$373,825 December, 1911, to \$343,530 December, 1912.

Manufactured lumber in the form of boards, planks, deals and other sawed stock was imported to the value of \$1,311,861 in December of last year. This was a slight increase over the preceding December.

The import value of wood pulp of all kinds decreased from \$1,442,997 December, 1911, to \$1,371,549 December, 1912.

Useless Hardwoods Will Have Value

Considerable interest has recently been aroused in the search for new woods suitable for shuttles. The supply of the two woods—dogwood and persimmon—which are used almost exclusively for this purpose both at home and abroad is becoming decidedly restricted. This is particularly the case with dogwood, which is considered the more desirable of the two. There is still considerable of the timber in the country, but it is so scattered that it is expensive to collect. Making shuttle blocks is an industry in itself and the ordinary lumberman cannot produce blocks to meet the rigid requirements of the manufacturers, due for the most part to lack of care in the process of seasoning. Consequently, unless there is enough timber in a place to make it worth the while of a block cutter, it will very likely go into other products. In parts of Maryland, for instance, there is considerable persimmon timber of fair quality, but the farmers have never heard of the shuttle market.

The requirements of a shuttle wood are very exacting. It must be highly resistant to wear and capable of becoming smoother with use. The shuttle is shot back and forth across the loom at very high speed and usually rests on nothing but the taut threads of the warp, so that it is very evident that the slightest tendency of the wood to roughen or check would render it worse than useless. The wear is considerable and a soft wood is soon worn out. The smoother a shuttle becomes the less friction it encounters and the longer it will last.

Woods with decided contrast between the two portions of the annual rings of growth cannot be employed. The springwood is considerably lighter and softer than that found later, and when subjected to wear the softer portions are worn down more rapidly, leaving the surface irregular. If used in a loom such projections would sooner or later catch in the warp and break it.

If a wood is too soft it will wear out too soon or become rough. If too brittle or too fissile it will not withstand the repeated blows of the pickerstaffs. If knotty it will wear down irregularly and cause trouble. If season-checked it will catch the threads of the warp in the cracks.

From these requirements it is evident that very few native woods could qualify. Almost every conifer would be ruled out at once because too soft or too uneven-textured or lacking in some important requirement. Yew has been tried but without success. Of the hardwood species the number of possibilities is greater and yet a close study of the properties of the various kind will eliminate over ninety-five per cent without actual trial. Moreover, it is not sufficient that a wood be found to meet the requirements, it must also exist in sufficient quantity to justify its employment.

The ideal shuttle wood is boxwood, but its scarcity and high price long ago prohibited its general employment for such purpose. Apple and pear wood gave good results, but the supply of the materials was so scattered and uncertain that they supplied the trade for only a short time. When dogwood and persimmon were found to fill the bill, there seems to have been no systematic effort made to determine if any other woods could be so employed.

One source of a great deal of trouble with both dogwood and persimmon is the large number of defects. Dogwood is mostly a small tree and quite full of knots. Persimmon grows larger but is equally defective from heart shake and black streaks. On an average, about two-thirds of every log has to be thrown away. The shuttle manu-

facturers discriminate against heartwood "because," in the language of an official, "a shuttle that is part heart is very liable to split along the line which separates the heart from the exterior wood, there being in many cases no permanent cohesion between the two sections." The tendency of the sapwood to split away from the heart is probably due to the difference in shrinkage in seasoning, the sapwood shrinking more. Persimmon heartwood becomes infiltrated with a black substance which leaves streaks of jet which behave quite differently from the rest of the wood. This tendency to blacken is carried to an extreme in the case of ebony (*Diospyros ebanum*) which is a brother to our own persimmon (*Diospyros virginiana*).

A wood well worth careful consideration is black gum (*Nyssa sylvatica*). The dry wood weighs about forty pounds per cubic foot as compared to forty-nine pounds for persimmon and fifty-one pounds for dogwood. Weight is not in itself essential except as it indicates strength, hardness and other properties. Black gum is fine-textured, the pores are small and diffused throughout the rings of growth instead of collected in bands. It is also tough and strong and appears to have the highly desirable property of wearing smooth. Its satisfactory use for rollers, floors, etc., indicates its wearing qualities. It is rather cross-grained and would have to be seasoned

carefully, but, for that matter, any shuttle wood must be seasoned with extreme care, so there need be no unavoidable difficulty from that source. Best of all, black gum is so plentiful and can be obtained in such sizes that if found suitable for shuttles a permanent supply at a reasonable price can be assured.

Another wood that gives even greater promise of being satisfactory in quality if not in quantity is the hornbeam or iron wood (*Ostrya virginiana*). It is a tree, occasionally from fifty to sixty feet high, with a short trunk two feet in diameter, though usually not more than twenty or thirty feet tall and with a trunk eighteen to twenty inches through. It is quite generally distributed throughout the

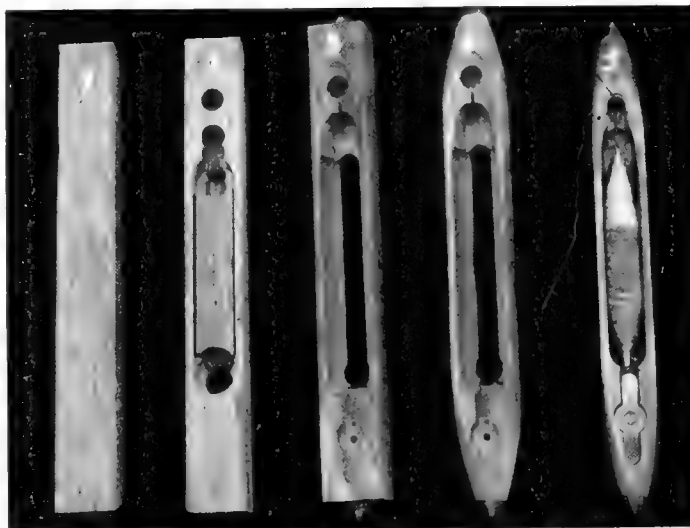
eastern half of the United States, though most abundant and of its largest size in southern Arkansas and Texas.

The wood of *Ostrya* is very heavy, hard, strong, tough, and difficult to split. The pores are too fine to be singly visible to the unaided eye, though near the outer edge of growth ring they are collected in small groups which appear as white dots. The pores are all small or minute, comparatively few in number, and arranged in irregularly branching radial lines. The rays are fine and indistinct. The color of the heartwood is light brown; the sapwood is very light with a pinkish hue.

The uses of this timber have been limited mostly to fence posts, mallets and homemade tool handles, levers, wedges and machinery parts. It would be particularly fortunate if it should be found valuable for shuttles, for it is common in nearly every woodlot throughout the hardwood region of the United States, and is generally considered a weed tree.

A prominent shuttle block cutter in Mississippi has recently cut a number of trees of blue beech (*Carpinus caroliniana*) and intends to make some sample shuttle blocks from them. He says the trees are plentiful and that they grow to a height of about sixteen feet to the first limb and have a very fluted or ribbed trunk.

Blue beech (also known as water beech, hornbeam, and ironwood) has much the same distribution and occurrence as hornbeam (*Ostrya*



FIVE OUT OF TWENTY-TWO STAGES IN THE EVOLUTION OF A SHUTTLE.

virginiana). The wood is hard, tough, rather difficult to split and about as heavy as black locust. The pores are comparatively few, very small to minute, those in the springwood in irregular groups which appear to the unaided eye as white dots, much the same as in *Ostrya*. The most characteristic feature of the wood is the large rays which are grouped and instead of running straight out from the pith, often curve to one side. This arrangement of the rays is believed to be responsible for the peculiar fluted or ribbed character of the trunk. They also interfere seriously with the process of seasoning, causing the wood to warp out of shape and to check. With care, however, it may be possible to make good shuttles out of it.

One of the most promising foreign woods for shuttles is the white quebracho (*Aspidosperma quebracho-blanco*) which is being imported in considerable quantities for various purposes. The tree is common in northern Argentina and other portions of South America. It is an evergreen hardwood, reaching a height of from sixty to one hundred feet and a diameter of from one to three feet. It is remarkable for its erect stem and wide-spreading crown. The wood is strong, close-grained, hard and very heavy, the weight of thoroughly dry material varying from fifty-five to sixty-three pounds per cubic foot. The color is yellowish white with a pinkish or rosy tint. The dense, uniform texture makes this wood suitable as a substitute for boxwood in certain uses and there is good reason to believe that it would make excellent shuttles at about the present cost of dogwood and persimmon.

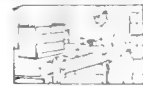
The western dogwood (*Cornus nuttallii*), which is quite common in the redwood forests of the Pacific coast, has often been mentioned as a possible shuttle wood because of its close relationship to the dogwood of the East (*Cornus florida*). The tree is small, though averaging larger and of better form than the eastern form. The wood, however, is considerably lighter in weight and less dense. So far as known to the writer it has never been used for shuttles and deserves a trial. The great distance from the cotton and woolen mills would prove a handicap, though not too great to be overcome if there should be no other objection.

Mesquite (*Prosopis juliflora*) of the arid Southwest has been suggested, but it is usually of such poor form that perfect shuttle blocks would be very difficult to get. The wood is quite brittle, and if made into a shuttle would probably go to pieces in a short time. Moreover, the local demand for mesquite is already great enough to consume all that is grown.

If it should be found that there are no satisfactory substitutes for dogwood and persimmon, the sooner it is known the better in order that provision may be made for preventing the exhaustion of these woods. There seems no reason why both species could not be artificially propagated. The growth under favorable conditions is fairly rapid and the trees would become merchantable as soon as a stump diameter of seven inches is attained. The matter seems important enough to warrant a careful and thorough canvass of the whole situation.



The Co-Operative Spirit



Editor's Note

The following article was read by J. K. Williams of the Williams Lumber Company, Fayetteville, Tenn., before the Hardwood Manufacturers' Association of the United States in convention at Cincinnati, O., February 4 and 5.

Six years ago, at our meeting in Louisville, I was assigned the reading of a paper on a subject very similar to this. It was therein pointed out that from no unanimity of purpose nor concert of action amongst the mills they were absolutely at the mercy of the buyers, trudging along without rudder or compass; selling in the different markets under their respective rules and all of them made in the interest of the dealer (for one rarely sold a consumer then), so that greater profits were to be had in the manipulation of grades than from added prices; but that as a result of four years of association work, after consulting the wants of the consuming element, we had established rules of inspection, alike just to both sides, besides achieving many other things of the greatest benefit to the manufacturer. But, gentlemen, while we have accomplished much since then, have we reached the goal?

It is needless to use your time in the enumeration of all the ills that are daily met with. "Kicks" of every kind, charges of unfairness and partiality by our inspectors to our members; charges even that our organization is dominated by and run solely in the interest of certain big mills and, in fact, every disparaging thing that can be said is drawn from the plethoric vocabulary of the selfish element which is fighting us, and hurled at us.

Is it not evident then that there is this conflict of interest—this warfare of which I have spoken? Human nature is all powerful, and selfishness, condemned as the chief sin of Holy Writ, is so closely related to self interest—self preservation, universally recognized as the first law of nature—that it must be governed and held under tight rein that justice may follow. Therefore, while excusing the other side for their human proclivities, it is equally natural for the manufacturers to defend themselves and to contend for their natural rights, and the chief of these is the right to make their own rules of inspection.

It is rank folly to say that I cannot do as I please with what is my own. Why, then, cannot we manufacturers who own the lumber absolutely dictate the grades and terms of sale in the disposal of it? True it is that there are two sides to every question and equally true that it requires two to make a bargain; but

not necessarily more than two, and the two in this case are logically the manufacturer and the consumer. It is simply a question of horse trading. We, the sawmills, have our barns full of a great variety of animals and Mr. Consumer comes along and wants one. He knows his requirements and, being shown through, selects this one or that one in accordance therewith and strikes a bargain or goes elsewhere, conditioned upon the price and terms. The two only are concerned in the deal and if they can agree, what right has any outsider to interfere?

I contend, therefore, that the manufacturers are clearly within their moral and legal rights in making and promulgating through their organization their own grading rules, sales code and other policies for the marketing of their products, and I for one am opposed to any further efforts toward compromise. Policy may dictate that we should consult the consumer in an effort to please him and learn all we can of his requirements. That is merely good business, but not necessarily that he or any one else should dictate our grading rules and so far as my information goes he does not want to do so. He is satisfied when he gets the grade best suited to his line of manufacture, cheerfully pays for it and calls for more of the same kind.

I have no fight to make on the wholesalers as a class. They are as a rule substantial, high minded business men. I am arguing in the abstract for a principle, an unquestionable right of the manufacturer and am against only that considerable element amongst the wholesalers—those whose greatest profits result from grade stuffing. Those of us with mills of moderate output whose business will not justify regularly keeping traveling salesmen in the field must necessarily sell through the wholesaler who can and does make the personal canvass for trade and we find his legitimate profits to be much less, as a rule, than the cost of such salesmen. I do contend, however, that they have no rights in the making of grades for our lumber and that their proper function is the buying and selling of same, under established rules, on the legitimate profit of the difference between the cost and selling price; and I maintain further that if the upright ones amongst

them will join the manufacturers in their efforts to eliminate this reprehensible practice of grade manipulation, the better it will be for all concerned. There may be some manufacturers who resort to it, but if so they are not loyal members of this association and my remarks are equally applicable to them. It is deception. It is dishonest, false pretense and disreputable. Honesty is the best policy and grade blending is not such. Let it, therefore, be the chief effort of every fair minded lumberman, be he manufacturer, dealer or consumer, to crush it out.

The power of organization is what we need, and all the troubles and hardships we have to battle against are but measures of our weakness and show up the importance of more members and more loyal members until our influence as an organization is felt—even pinches a little, if you please—and then, and only then, can we win the battle and enjoy our just rights. Why, gentlemen, no argument is needed to convince you of what can be achieved by organization. Look around you and what distinct line of business of any magnitude do you find not organized? Certainly every line of manufacture of any importance is so and even we lumbermen feel the force of such in the harvester trust, though I am not advocating the formation of a trust, nor do I think it necessary. Witness also the steel trust and all the other gigantic trusts and combinations, which I mention merely to show the power of thorough organization and not as models for ourselves. But at any rate what they can and do accomplish is marvelous, and though their existence is dangerous, owing to the selfishness of human nature, it must be admitted that much good to the entire world results from their strength of organization and combined capital.

Some months ago, in a conversation with a fellow traveller, this question of organization was an interesting topic between us. He was a shoe manufacturer and told of the difficulties his organization had been fighting—such, for instance, as the labor problem, the strike question, costs, credit ratings, etc.—but especially was I impressed in his relating that after years of effort between the tanneries and themselves, the tanneries had established such well understood grades of leather that no difficulty was had in knowing just what to expect when an order was given. Manufacturer and consumer, don't you see?

Now why cannot we hardwood millmen do the same?

But these are not all the benefits to the manufacturer resultant from organization. Ours is a distinct line in many respects. The cost problem in its many phases is ever staring us in the face. Cost of production has been the great topic of discussion for many years, officially in the reading of papers on the subject and investigation, as well as socially in our annual gatherings and I speak from experience in saying that valuable ideas and the greatest benefit have resulted.

The selling cost, however, I fear has not received the same deserved attention. A man may spend years in reducing production cost 50 cents and let the selling cost increase \$1.50. I cannot speak for the larger mills who sell almost exclusively through their travelling men, but I do know that with us a very considerable selling cost results from frivolous complaints, requiring small concessions and when large enough to justify a reinspection, the excess over the small margin allowed by our rules is barely sufficient to put the cost on us, thus materially adding to the selling cost.

It seems to me that here is a field that right now should receive our best attention. The more direct and intimate the contact between the producer and the consumer, the less there will be of such expense; and if I may venture a suggestion it is that the best investment this association could make would be in putting a number of wisely selected, well posted men in the consuming field and keeping them there until the consuming element is so thoroughly familiar with our grading rules that when one orders a certain grade he will know exactly what he will get. And further, the work of these same men could be made greatly beneficial in studying the peculiar lines of manufacture by consumers and let such information be published through our bulletin as guides to the membership in making shipments.

I might mention many other advantages of organization pertaining solely to the manufacturer and the astonishing thing is why are they not all members of this association.

Is it because you are prejudiced from listening to defamatory reports, or because, in our infancy, you became members of another association and feel that we are still too weak to give you equal benefit? Then come in and give us your loyal support in suppressing false rumors and in bringing the manufacturers up to your highest ideals. We are all in the same boat. Our trials and difficulties are identical; our interests the same. Or possibly you are one of that class which I have heard of saying: "You adopt and establish one set of grading rules and I will join you." Foolish question and unfair! As well might the recruit say to the general of the army: "You go in and win the battle and I will share with you the victor's gain." Get in the ranks yourself and help win the battle and thus fit yourself for enjoying its emoluments with a consciousness of duty done.

And now in closing, let me urge every member to renewed loyalty in the support of every function of our association work. Stand firmly on our rules and let each one do all in his power toward the swelling of our membership until there is not a sawmill left out of the fold.

Lumbering in Jamaica

The island of Jamaica is not likely to attract many lumbermen from the United States while present methods of sawing lumber continue. The island's forest area is about 500,000 acres. It is remarkably rich in valuable hardwoods, 113 species having been listed, all of which are suitable for cabinet work, furniture, house finish, or some other useful purpose. Only a few of these woods are known in the United States. Mahogany, Spanish cedar, satinwood and rosewood are about the only ones with which woodworkers in this country are acquainted, although there are more than one hundred others ranging in value from rosewood down to crosstie timber. A recent consular report described conditions on this island with regard to lumbering. An extract follows:

There are no sawmills in Jamaica. The only sort of mill that could be operated to any advantage here would be a portable outfit, which could be easily transported from place to place. As there are no large bodies of well-timbered lands in Jamaica, and as much of the timber, which is mostly of small to medium size, is found on the hills and mountains, it would be difficult to operate a mill profitably. Under the conditions existing in this island, where labor is abundant and consequently cheap, the most practicable method of manufacturing lumber from native timber is to saw it by hand, as has been done since the first settlement of Jamaica. Where the slope of the ground is favorable, the logs are rolled upon a framework; otherwise a pit is dug, in which one man stands, while another stands above the log to operate the long rip saw. After ripping off slabs on two sides, the men line the log with a cord that is dipped in a chalk or charcoal solution. By such primitive methods they are able to saw boards of nearly uniform thickness. In the towns along the coast especially American pine is generally used in the construction of houses, but in the interior of the island there are many dwellings and other buildings, and some of considerable size, which have been built wholly of hand-sawed lumber. Mahogany boards are worth in the local markets from \$70 to \$80, cedar boards from \$50 to \$60, and framing material from \$25 to \$35 per 1,000 feet, prices that seem quite reasonable, considering the laborious method of producing this lumber.

The native woods in most common use for general building purposes are West Indian cedar, bastard cedar (*Guazuma tomentosa*), and bullit wood (*Dipholis montana*). Even when American pine is used for a building, the native woods are preferred for sills and sleepers, on account of their greater durability in this climate and their freedom from the ravages of ants and worms. Some of the native woods are so hard when seasoned that it is difficult to drive nails into them. The use of sapodilla (*Mimusops excisa*) for railway ties was abandoned because it was almost impossible to drive spikes into it.

The Mail Bag

Any reader of **HARDWOOD RECORD** desiring to communicate with any of the inquirers listed in this section can have the addresses on written request to the Mail Bag Department, **HARDWOOD RECORD**, 537 South Dearborn Street, Chicago, and referring to the number at the head of each letter and enclosing a self-addressed stamped envelope.

B C90—Seeks Bent Oval Rims and Veneered Panels

Hagerstown, Md., Jan. 24. Editor **HARDWOOD RECORD**: We would like to know where we can get built up or bent oval rims, figured quartered oak and mahogany. We buy in quantities, sizes 26 1/4"x43 1/4" and 26"x48".

The above inquiry is from a high-class furniture manufacturing house and its requirements should be of interest to producers of both bent and flat panels. Address on application. EDITOR.

B 391—Wants Basswood, Oak and Poplar

Chicago, Ill., Jan. 27. Editor **HARDWOOD RECORD**: We are in the market for 2 cars 1" plain red oak, 1 car quarter sawed white oak, 2 cars of basswood and 1 car of poplar, upon which we will receive figures shortly.

B 392—In the Market for Black Gum

Liverpool, Jan. 8. Editor **HARDWOOD RECORD**: We shall esteem it a favor if you will put us in communication with source of supply for black gum, as we are substantial buyers of black gum lumber and we have the following inquiries open at the present time:

Twelve cars tupelo or black gum lumber, to be shipped in quantities of about a carload a month from May/June next. The stock required is as follows: About 50 per cent No. 1 common and 50 per cent No. 2 common in each car, and we shall be glad to have the lowest prices for each grade, c. i. f. Liverpool, for the undermentioned unplanned stock:

Two cars 3/4", 8 cars 1", 1 car 1 1/4" and 1 car 1 1/2". If unable to quote on tupelo or black gum, please quote on sap gum.

Also quote on 200,000 to 300,000 feet of No. 1 common black gum boards 1" thick. The specifications of this stock are quite immaterial. We could take it in narrow widths and short lengths and delivery is required in, say, 2 to 3 cars per month during this year. Please quote c. i. f. Liverpool, less 2 per cent.

The above inquirer has been supplied with a list of several producers of black gum.—EDITOR.

B 393—Has Applewood to Market

South Bend, Ind., Jan. 30. Editor **HARDWOOD RECORD**: We would be pleased to have you advise us of anyone you know that is handling applewood, or would be in position to buy same, and we would also be pleased to know what the market price is in this kind of wood.

Thanking you for advising us,

The above correspondent has been advised that the largest users of applewood are manufacturers of saw handles, and that these people, it is understood, have considerable difficulty getting enough of this material to meet their requirements. He has been supplied with a list of a few large producers of handsaws.

Regarding the price of this wood, the inquirer has been informed that reports on applewood used in Michigan during 1911 show that the average price was \$50 a thousand feet during that year. While this price was based on feet, board measure, applewood is sold by the cord, it being figured on a basis of ninety cubic feet to the cord.—EDITOR.

B 394—Wants Glued-Up Dimension Stock

Brooklyn, N. Y., Jan. 30.—Editor **HARDWOOD RECORD**: Would you kindly send a list of firms who are in a position to manufacture glued-up dimension stock to be used for plumbers' woodwork? The lengths are very short, running from 6" to 10" wide, to be made of 4/4 and 5/4 stock, and can be either ash, oak or chestnut. Terms, 2 per cent 10 days.

We would appreciate very much any information you may give us on this line.

The above has been informed of various sources of supply for this material.—EDITOR.

B 395—Wants Flag Sticks

Saginaw, Mich., Jan. 31.—Editor **HARDWOOD RECORD**: Can you refer us to someone who makes a specialty of getting out flag sticks? We want some sticks 30" long and 3/4" in diameter.

Any information you can give us will be greatly appreciated.

This prospective buyer of flag sticks has been given the names of a few concerns manufacturing such material.—EDITOR.

B 396—Wants Taped-up Quartered Oak Veneer

The inquirer desires the veneer, received from a large manufacturer of veneered doors and panels located in San Francisco:

Sizes: 24"x48", 24"x72", 30"x72", 30"x96", 36"x72", 36"x96", 42"x72", 42"x96", 48"x72", 48"x96", 54"x72", 54"x96", 60"x72", 60"x96", 66"x72", 66"x96", 72"x72", 72"x96", 78"x72", 78"x96", 84"x72", 84"x96", 90"x72", 90"x96", 96"x72", 96"x96", 102"x72", 102"x96, 108"x72", 108"x96, 114"x72", 114"x96, 120"x72", 120"x96, 126"x72", 126"x96, 132"x72", 132"x96, 138"x72", 138"x96, 144"x72", 144"x96, 150"x72", 150"x96, 156"x72", 156"x96, 162"x72", 162"x96, 168"x72", 168"x96, 174"x72", 174"x96, 180"x72", 180"x96, 186"x72", 186"x96, 192"x72", 192"x96, 198"x72", 198"x96, 204"x72", 204"x96, 210"x72", 210"x96, 216"x72", 216"x96, 222"x72", 222"x96, 228"x72", 228"x96, 234"x72", 234"x96, 240"x72", 240"x96, 246"x72", 246"x96, 252"x72", 252"x96, 258"x72", 258"x96, 264"x72", 264"x96, 270"x72", 270"x96, 276"x72", 276"x96, 282"x72", 282"x96, 288"x72", 288"x96, 294"x72", 294"x96, 300"x72", 300"x96, 306"x72", 306"x96, 312"x72", 312"x96, 318"x72", 318"x96, 324"x72", 324"x96, 330"x72", 330"x96, 336"x72", 336"x96, 342"x72", 342"x96, 348"x72", 348"x96, 354"x72", 354"x96, 360"x72", 360"x96, 366"x72", 366"x96, 372"x72", 372"x96, 378"x72", 378"x96, 384"x72", 384"x96, 390"x72", 390"x96, 396"x72", 396"x96, 402"x72", 402"x96, 408"x72", 408"x96, 414"x72", 414"x96, 420"x72", 420"x96, 426"x72", 426"x96, 432"x72", 432"x96, 438"x72", 438"x96, 444"x72", 444"x96, 450"x72", 450"x96, 456"x72", 456"x96, 462"x72", 462"x96, 468"x72", 468"x96, 474"x72", 474"x96, 480"x72", 480"x96, 486"x72", 486"x96, 492"x72", 492"x96, 498"x72", 498"x96, 504"x72", 504"x96, 510"x72", 510"x96, 516"x72", 516"x96, 522"x72", 522"x96, 528"x72", 528"x96, 534"x72", 534"x96, 540"x72", 540"x96, 546"x72", 546"x96, 552"x72", 552"x96, 558"x72", 558"x96, 564"x72", 564"x96, 570"x72", 570"x96, 576"x72", 576"x96, 582"x72", 582"x96, 588"x72", 588"x96, 594"x72", 594"x96, 600"x72", 600"x96, 606"x72", 606"x96, 612"x72", 612"x96, 618"x72", 618"x96, 624"x72", 624"x96, 630"x72", 630"x96, 636"x72", 636"x96, 642"x72", 642"x96, 648"x72", 648"x96, 654"x72", 654"x96, 660"x72", 660"x96, 666"x72", 666"x96, 672"x72", 672"x96, 678"x72", 678"x96, 684"x72", 684"x96, 690"x72", 690"x96, 696"x72", 696"x96, 702"x72", 702"x96, 708"x72", 708"x96, 714"x72", 714"x96, 720"x72", 720"x96, 726"x72", 726"x96, 732"x72", 732"x96, 738"x72", 738"x96, 744"x72", 744"x96, 750"x72", 750"x96, 756"x72", 756"x96, 762"x72", 762"x96, 768"x72", 768"x96, 774"x72", 774"x96, 780"x72", 780"x96, 786"x72", 786"x96, 792"x72", 792"x96, 798"x72", 798"x96, 804"x72", 804"x96, 810"x72", 810"x96, 816"x72", 816"x96, 822"x72", 822"x96, 828"x72", 828"x96, 834"x72", 834"x96, 840"x72", 840"x96, 846"x72", 846"x96, 852"x72", 852"x96, 858"x72", 858"x96, 864"x72", 864"x96, 870"x72", 870"x96, 876"x72", 876"x96, 882"x72", 882"x96, 888"x72", 888"x96, 894"x72", 894"x96, 900"x72", 900"x96, 906"x72", 906"x96, 912"x72", 912"x96, 918"x72", 918"x96, 924"x72", 924"x96, 930"x72", 930"x96, 936"x72", 936"x96, 942"x72", 942"x96, 948"x72", 948"x96, 954"x72", 954"x96, 960"x72", 960"x96, 966"x72", 966"x96, 972"x72", 972"x96, 978"x72", 978"x96, 984"x72", 984"x96, 990"x72", 990"x96, 996"x72", 996"x96, 1002"x72", 1002"x96, 1008"x72", 1008"x96, 1014"x72", 1014"x96, 1020"x72", 1020"x96, 1026"x72", 1026"x96, 1032"x72", 1032"x96, 1038"x72", 1038"x96, 1044"x72", 1044"x96, 1050"x72", 1050"x96, 1056"x72", 1056"x96, 1062"x72", 1062"x96, 1068"x72", 1068"x96, 1074"x72", 1074"x96, 1080"x72", 1080"x96, 1086"x72", 1086"x96, 1092"x72", 1092"x96, 1098"x72", 1098"x96, 1104"x72", 1104"x96, 1110"x72", 1110"x96, 1116"x72", 1116"x96, 1122"x72", 1122"x96, 1128"x72", 1128"x96, 1134"x72", 1134"x96, 1140"x72", 1140"x96, 1146"x72", 1146"x96, 1152"x72", 1152"x96, 1158"x72", 1158"x96, 1164"x72", 1164"x96, 1170"x72", 1170"x96, 1176"x72", 1176"x96, 1182"x72", 1182"x96, 1188"x72", 1188"x96, 1194"x72", 1194"x96, 1200"x72", 1200"x96, 1206"x72", 1206"x96, 1212"x72", 1212"x96, 1218"x72", 1218"x96, 1224"x72", 1224"x96, 1230"x72", 1230"x96, 1236"x72", 1236"x96, 1242"x72", 1242"x96, 1248"x72", 1248"x96, 1254"x72", 1254"x96, 1260"x72", 1260"x96, 1266"x72", 1266"x96, 1272"x72", 1272"x96, 1278"x72", 1278"x96, 1284"x72", 1284"x96, 1290"x72", 1290"x96, 1296"x72", 1296"x96, 1302"x72", 1302"x96, 1308"x72", 1308"x96, 1314"x72", 1314"x96, 1320"x72", 1320"x96, 1326"x72", 1326"x96, 1332"x72", 1332"x96, 1338"x72", 1338"x96, 1344"x72", 1344"x96, 1350"x72", 1350"x96, 1356"x72", 1356"x96, 1362"x72", 1362"x96, 1368"x72", 1368"x96, 1374"x72", 1374"x96, 1380"x72", 1380"x96, 1386"x72", 1386"x96, 1392"x72", 1392"x96, 1398"x72", 1398"x96, 1404"x72", 1404"x96, 1410"x72", 1410"x96, 1416"x72", 1416"x96, 1422"x72", 1422"x96, 1428"x72", 1428"x96, 1434"x72", 1434"x96, 1440"x72", 1440"x96, 1446"x72", 1446"x96, 1452"x72", 1452"x96, 1458"x72", 1458"x96, 1464"x72", 1464"x96, 1470"x72", 1470"x96, 1476"x72", 1476"x96, 1482"x72", 1482"x96, 1488"x72", 1488"x96, 1494"x72", 1494"x96, 1500"x72", 1500"x96, 1506"x72", 1506"x96, 1512"x72", 1512"x96, 1518"x72", 1518"x96, 1524"x72", 1524"x96, 1530"x72", 1530"x96, 1536"x72", 1536"x96, 1542"x72", 1542"x96, 1548"x72", 1548"x96, 1554"x72", 1554"x96, 1560"x72", 1560"x96, 1566"x72", 1566"x96, 1572"x72", 1572"x96, 1578"x72", 1578"x96, 1584"x72", 1584"x96, 1590"x72", 1590"x96, 1596"x72", 1596"x96, 1602"x72", 1602"x96, 1608"x72", 1608"x96, 1614"x72", 1614"x96, 1620"x72", 1620"x96, 1626"x72", 1626"x96, 1632"x72", 1632"x96, 1638"x72", 1638"x96, 1644"x72", 1644"x96, 1650"x72", 1650"x96, 1656"x72", 1656"x96, 1662"x72", 1662"x96, 1668"x72", 1668"x96, 1674"x72", 1674"x96, 1680"x72", 1680"x96, 1686"x72", 1686"x96, 1692"x72", 1692"x96, 1698"x72", 1698"x96, 1704"x72", 1704"x96, 1710"x72", 1710"x96, 1716"x72", 1716"x96, 1722"x72", 1722"x96, 1728"x72", 1728"x96, 1734"x72", 1734"x96, 1740"x72", 1740"x96, 1746"x72", 1746"x96, 1752"x72", 1752"x96, 1758"x72", 1758"x96, 1764"x72", 1764"x96, 1770"x72", 1770"x96, 1776"x72", 1776"x96, 1782"x72", 1782"x96, 1788"x72", 1788"x96, 1794"x72", 1794"x96, 1800"x72", 1800"x96, 1806"x72", 1806"x96, 1812"x72", 1812"x96, 1818"x72", 1818"x96, 1824"x72", 1824"x96, 1830"x72", 1830"x96, 1836"x72", 1836"x96, 1842"x72", 1842"x96, 1848"x72", 1848"x96, 1854"x72", 1854"x96, 1860"x72", 1860"x96, 1866"x72", 1866"x96, 1872"x72", 1872"x96, 1878"x72", 1878"x96, 1884"x72", 1884"x96, 1890"x72", 1890"x96, 1896"x72", 1896"x96, 1902"x72", 1902"x96, 1908"x72", 1908"x96, 1914"x72", 1914"x96, 1920"x72", 1920"x96, 1926"x72", 1926"x96, 1932"x72", 1932"x96, 1938"x72", 1938"x96, 1944"x72", 1944"x96, 1950"x72", 1950"x96, 1956"x72", 1956"x96, 1962"x72", 1962"x96, 1968"x72", 1968"x96, 1974"x72", 1974"x96, 1980"x72", 1980"x96, 1986"x72", 1986"x96, 1992"x72", 1992"x96, 1998"x72", 1998"x96, 2004"x72", 2004"x96, 2010"x72", 2010"x96, 2016"x72", 2016"x96, 2022"x72", 2022"x96, 2028"x72", 2028"x96, 2034"x72", 2034"x96, 2040"x72", 2040"x96, 2046"x72", 2046"x96, 2052"x72", 2052"x96, 2058"x72", 2058"x96, 2064"x72", 2064"x96, 2070"x72", 2070"x96, 2076"x72", 2076"x96, 2082"x72", 2082"x96, 2088"x72", 2088"x96, 2094"x72", 2094"x96, 2100"x72", 2100"x96, 2106"x72", 2106"x96, 2112"x72", 2112"x96, 2118"x72", 2118"x96, 2124"x72", 2124"x96, 2130"x72", 2130"x96, 2136"x72", 2136"x96, 2142"x72", 2142"x96, 2148"x72", 2148"x96, 2154"x72", 2154"x96, 2160"x72", 2160"x96, 2166"x72", 2166"x96, 2172"x72", 2172"x96, 2178"x72", 2178"x96, 2184"x72", 2184"x96, 2190"x72", 2190"x96, 2196"x72", 2196"x96, 2202"x72", 2202"x96, 2208"x72", 2208"x96, 2214"x72", 2214"x96, 2220"x72", 2220"x96, 2226"x72", 2226"x96, 2232"x72", 2232"x96, 2238"x72", 2238"x96, 2244"x72", 2244"x96, 2250"x72", 2250"x96, 2256"x72", 2256"x96, 2262"x72", 2262"x96, 2268"x72", 2268"x96, 2274"x72", 2274"x96, 2280"x72", 2280"x96, 2286"x72", 2286"x96, 2292"x72", 2292"x96, 2298"x72", 2298"x96, 2304"x72", 2304"x96, 2310"x72", 2310"x96, 2316"x72", 2316"x96, 2322"x72", 2322"x96, 2328"x72", 2328"x96, 2334"x72", 2334"x96, 2340"x72", 2340"x96, 2346"x72", 2346"x96, 2352"x72", 2352"x96, 2358"x72", 2358"x96, 2364"x72", 2364"x96, 2370"x72", 2370"x96, 2376"x72", 2376"x96, 2382"x72", 2382"x96, 2388"x72", 2388"x96, 2394"x72", 2394"x96, 2400"x72", 2400"x96, 2406"x72", 2406"x96, 2412"x72", 2412"x96, 2418"x72", 2418"x96, 2424"x72", 2424"x96, 2430"x72", 2430"x96, 2436"x72", 2436"x96, 2442"x72", 2442"x96, 2448"x72", 2448"x96, 2454"x72", 2454"x96, 2460"x72", 2460"x96, 2466"x72", 2466"x96, 2472"x72", 2472"x96, 2478"x72", 2478"x96, 2484"x72", 2484"x96, 2490"x72", 2490"x96, 2496"x72", 2496"x96, 2502"x72", 2502"x96, 2508"x72", 2508"x96, 2514"x72", 2514"x96, 2520"x72", 2520"x96, 2526"x72", 2526"x96, 2532"x72", 2532"x96, 2538"x72", 2538"x96, 2544"x72", 2544"x96, 2550"x72", 2550"x96, 2556"x72", 2556"x96, 2562"x72", 2562"x96, 2568"x72", 2568"x96, 2574"x72", 2574"x96, 2580"x72", 2580"x96, 2586"x72", 2586"x96, 2592"x72", 2592"x96, 2598"x72", 2598"x96, 2604"x72", 2604"x96, 2610"x72", 2610"x96, 2616"x72", 2616"x96, 2622"x72", 2622"x96, 2628"x72", 2628"x96, 2634"x72", 2634"x96, 2640"x72", 2640"x96, 2646"x72", 2646"x96, 2652"x72", 2652"x96, 2658"x72", 2658"x96, 2664"x72", 2664"x96, 2670"x72", 2670"x96, 2676"x72", 2676"x96, 2682"x72", 2682"x96, 2688"x72", 2688"x96, 2694"x72", 2694"x96, 2700"x72", 2700"x96, 2706"x72", 2706"x96, 2712"x72", 2712"x96, 2718"x72", 2718"x96, 2724"x72", 2724"x96, 2730"x72", 2730"x96, 2736"x72", 2736"x96, 2742"x72", 2742"x96, 2748"x72", 2748"x96, 2754"x72", 2754"x96, 2760"x72", 2760"x96, 2766"x72", 2766"x96, 2772"x72", 2772"x96, 2778"x72", 2778"x96, 2784"x72", 2784"x96, 2790"x72", 2790"x96, 2796"x72", 2796"x96, 2802"x72", 2802"x96, 2808"x72", 2808"x96, 2814"x72", 2814"x96, 2820"x72", 2820"x96, 2826"x72", 2826"x96, 2832"x72", 2832"x96, 2838"x72", 2838"x96, 2844"x72", 2844"x96, 2850"x72", 2850"x96, 2856"x72", 2856"x96, 2862"x72", 2862"x96, 2868"x72", 2868"x96, 2874"x72", 2874"x96, 2880"x72", 2880"x96, 2886"x72", 2886"x96, 2892"x72", 2892"x96, 2898"x72", 2898"x96, 2904"x72", 2904"x96, 2910"x72", 2910"x96, 2916"x72", 2916"x96, 2922"x72", 2922"x96, 2928"x72", 2928"x96, 2934"x72", 2934"x96, 2940"x72", 2940"x96, 2946"x72", 2946"x96, 2952"x72", 2952"x96, 2958"x72", 2958"x96, 2964"x72", 2964"x96, 2970"x72", 2970"x96, 2976"x72", 2976"x96, 2982"x72", 2982"x96, 2988"x72", 2988"x96, 2994"x72", 2994"x96, 3000"x72", 3000"x96, 3006"x72", 3006"x96, 3012"x72", 3012"x96, 3018"x72", 3018"x96, 3024"x72", 3024"x96, 3030"x72", 3030"x96, 3036"x72", 3036"x96, 3042"x72", 3042"x96, 3048"x72", 3048"x96, 3054"x72", 3054"x96, 3060"x72", 3060"x96, 3066"x72", 3066"x96, 3072"x72", 3072"x96, 3078"x72", 3078"x96, 3084"x72", 3084"x96, 3090"x72", 3090"x96, 3096"x72", 3096"x96, 3102"x72", 3102"x96, 3108"x72", 3108"x96, 3114"x72", 3114"x96, 3120"x72", 3120"x96, 3126"x72", 3126"x96, 3132"x72", 3132"x96, 3138"x72", 3138"x96, 3144"x72", 3144"x96, 3150"x72", 3150"x96, 3156"x72", 3156"x96, 3162"x72", 3162"x96, 3168"x72", 3168"x96, 3174"x72", 3174"x96, 3180"x72", 3180"x96, 3186"x72", 3186"x96, 3192"x72", 3192"x96, 3198"x72", 3198"x96, 3204"x72", 3204"x96, 3210"x72", 3210"x96, 3216"x72", 3216"x96, 3222"x72", 3222"x96, 3228"x72", 3228"x96, 3234"x72", 3234"x96, 3240"x72", 3240"x96, 3246"x72", 3246"x96, 3252"x72", 3252"x96, 3258"x72", 3258"x96, 3264"x72", 3264"x96, 3270"x72", 3270"x96, 3276"x72", 3276"x96, 3282"x72", 3282"x96, 3288"x72", 3288"x96, 3294"x72", 3294"x96, 3300"x72", 3300"x96, 3306"x72", 3306"x96, 3312"x72", 3312"x96, 3318"x72", 3318"x96, 3324"x72", 3324"x96, 3330"x72", 3330"x96, 3336"x72", 3336"x96, 3342"x72", 3342"x96, 3348"x72", 3348"x96, 3354"x72", 3354"x96, 3360"x72", 3360"x96, 3366"x72", 3366"x96, 3372"x72", 3372"x96, 3378"x72", 3378"x96, 3384"x72", 3384"x96, 3390"x72", 3390"x96, 3396"x72", 3396"x96, 3402"x72", 3402"x96, 3408"x72", 3408"x96, 3414"x72", 3414"x96, 3420"x72", 3420"x96, 3426"x72", 3426"x96, 3432"x72", 3432"x96, 3438"x72", 3438"x96, 3444"x72", 3444"x96, 3450"x72", 3450"x96, 3456"x72", 3456"x96, 3462"x72", 3462"x96, 3468"x72", 3468"x96, 3474"x72", 3474"x96, 3480"x72", 3480"x96, 3486"x72", 3486"x96, 3492"x72", 3492"x96, 3498"x72", 3498"x96, 3504"x72", 3504"x96, 3510"x72", 3510"x96, 3516"x72", 3516"x96, 3522"x72", 3522"x96, 3528"x72", 3528"x96, 3534"x72

the paper with a few remarks of his own, which, together with the paper, very favorably impressed the retail listeners. Mr. Hess, speaking for the retailers, said that the question had been put to them in a different light than ever before.

Demurrage matters occupied discussion at the opening of Thursday's session. There was also a talk on the utilization of the blight-killed chestnut trees. John P. Wendling of the Chestnut Tree Blight Commission delivered this talk and said that blight-killed chestnut can be utilized, if cut soon after its death, for various purposes.

At two p. m. on Thursday, those in attendance at the convention were served with a luncheon. The principal speaker was the Honorable William Hodges Mann, governor of Virginia. Dr. Joseph S. Dixon also spoke. The luncheoners were presented with suitable souvenirs.

Semi-Monthly Meeting Memphis Lumbermen's Club

James E. Stark, chairman of the law and insurance committee of the Lumbermen's Club, scored the statement recently prepared by the board companies showing premiums paid and losses experienced by the lumber and woodworking industry of Memphis. He said that the statement would not show anything like the total of the premiums paid by the lumber firms, and that the greater portion of the loss ascribed to lumber firms had been incurred in connection with woodworking enterprises not directly identified with the lumber industry. It was shown that the total premiums paid by lumber firms amounted to \$86,306 per annum for the past ten years and that the losses paid in the meantime had been \$564,357.41. It was shown, however, that the woodworking enterprises which paid premiums of only \$14,000 per annum had experienced losses of \$369,970.27. This left the actual lumber companies with losses of only \$194,387.14 after paying premiums of \$86,306 per annum, or \$863,060 for the entire period of ten years. Mr. Stark thought that the insurance companies were making a little money out of the insurance carried for lumber firms, and reiterated his belief that if the lumbermen kept up the fight it would be possible to demonstrate to the insurance companies that the rates were entirely too high on lumber insurance for Memphis.

It was suggested that the secretary of the club send out to all lumbermen of Memphis requests for accurate information as to the amount of premiums paid and losses experienced during 1912. It is hoped, by this means, to compile an accurate statement to be used as a basis in further efforts in the direction of securing lower rates.

The special committee appointed to take up with the management of the new Chisca hotel the subject of finishing this structure in red gum instead of birch reported that the outlook was reasonably favorable. It will depend upon what the difference in cost is as between birch and red gum. It is likely that the red gum manufacturers here will make up the difference if it is not found to be too large. It is proposed to use the red gum in its natural state so that it will show the high capabilities and possibilities of this material as a finishing proposition. The report was accepted and the committee was instructed to continue negotiations.

There will be certain changes made in the method of electing officers of the club if the report made by the special committee appointed for that purpose is adopted. The old campaign will be eliminated and the nomination of officers and the election itself will occur the same evening, this proving a feature of the annual banquet. These changes, however, can not be voted upon until after the thirty days' notice required by the constitution.

John W. McClure of the river and rail committee called the attention of the club to the fact that there would be two important hearings before the Interstate Commerce Commission within the near future. The first is to occur at St. Louis, Feb. 10, and is to cover the proposed advance of two cents per hundred pounds from Louisiana and Arkansas to points in Missouri, Kansas and Nebraska. The second is to be held at Memphis and is to deal with the advance on rates on hardwood shipments from Louisiana and Arkansas points to Memphis and from Memphis and Mississippi river points to New Orleans. Mr. McClure thought it was highly important that, while these hearings are to be looked after by the Southern Hardwood Traffic Bureau, the lumbermen themselves should attend in as large a body as possible to the end that the right sort of interest might be indicated in the proposition. He thought the moral effect of such a course would be quite good. In making his report Mr. McClure took advantage of the opportunity of complimenting the Southern Hardwood Traffic Bureau on the excellent work which it is doing in behalf of the hardwood lumber industry.

D. H. Hall of the D. H. Hall Lumber Company, New Albany, Miss., was elected an associate member, and William Pritchard of the John M. Pritchard Lumber Company was elected an active member.

Meeting of Cincinnati Lumbermen's Club

The regular monthly meeting and dinner of the Lumbermen's Club was held at the Business Men's Club, Feb. 3. About twenty delegates to the convention of the Hardwood Manufacturers' Association of the United States were guests at the meeting. After a very toothsome beefsteak dinner was much enjoyed by all present, President Shiels called upon ex-Presidents W. B. Townsend and R. M. Carrier of the Hardwood Manufacturers' Association. Both of these gentlemen responded briefly and then asked to be excused because of other business requiring their attention.

After the reading of the minutes, President Shiels introduced Thos. E. Hanlon of the Employers' Liability Assurance Corporation, who spoke at length on the bill now pending before the Ohio State Legislature,

called The Workmen's Compulsory Compensation Act, which seeks to place a very serious burden upon the employers of labor in this state and, if passed, would practically wipe out casualty insurance in the state and give the state a monopoly that is considered very unjust, and the provisions for the alleged protection to employees, irrespective of the rights of employers, have stirred merchants and manufacturers to make a very strong protest against the enactment of any such drastic legislation. The club passed a resolution requesting the framer of the bill, Senator W. M. Green, also the chairman of the Hamilton county delegation, Hon. Thornton R. Snyder, to postpone final action on the measure for at least sixty days, to give employers an opportunity to investigate the proposition thoroughly. The secretary was ordered to send copies of the resolution to both of these gentlemen and also to Governor Cox, asking him to use his influence to have the matter delayed. In addition to this action, there will be a large delegation of prominent business men at Columbus on Wednesday to protest against the measure. Anticipating a postponement, the club appointed a committee of three, consisting of W. S. Sterret, C. L. Smith and Fred Mowbray, to investigate the bill as proposed and to report at the next club meeting.

An invitation from the National Wholesale Lumber Dealers' Association, inviting the members of the club to attend its convention at Atlantic City, March 6 and 7, was read, and President Shiels appointed W. A. Bennett, T. J. Moffett and A. Schmidt to represent the club at this convention.

After the conclusion of business, the balance of the evening was devoted to talks by a number of the visitors who were called upon by President Shiels.

Builders' Exchange Organizes at Roanoke

The Builders' Exchange has been organized at Roanoke, Va., and occupies a centrally-located three-story building fitted up with every convenience for its members and patrons. The membership is over sixty at present and comprises the leading architects, contractors, sub-contractors, supply dealers, and the principal manufacturing interests of Roanoke and adjacent territory.

The first floor of the building is in use for exhibit purposes, there being about forty exhibits of all kinds of building material. In fact, everything is shown which enters into construction and the finishing of buildings. The second floor is given over to reading and writing rooms, estimating and consultation room, an auditorium, while the third floor is divided up into suitable offices to accommodate some of the members.

Traffic Matters Around Memphis

J. H. Townsend, manager of the Southern Hardwood Traffic Bureau, is authority for the statement that the steamship companies and the railroads west of the Mississippi river, with the exception of the Southern Pacific, have reached an agreement whereby through bills of lading on export shipments of lumber will be issued after March 3. Mr. Townsend has not received all the details of the adjustment as between the steamship companies and the railroads but it is understood that the western lines will issue export bills on much the same terms as the lines east of the Mississippi. The eastern roads have been requiring the engagement of steamship room out of New Orleans and other ports before issuing through bills and the western lines will require similar action on the part of exporters of lumber as well as other commodities. This will necessarily entail some delay in the handling of export shipments, but it is regarded as infinitely better than to handle lumber on local bills to ship side. Lumbermen are therefore very much pleased with this arrangement as it is felt that it will greatly facilitate the movement of lumber to the ports and thence to Europe.

The Southern Pacific is still holding out and it is said by Mr. Townsend that the case of the Anderson-Tully Company, brought for the purpose of securing an order from the Interstate Commerce Commission, making it compulsory upon the western lines to issue through bills of lading, will be continued. None of the other lines will be party defendants to this action. The lumber exporters here are very anxious to secure a ruling from the commission on this point and they are likewise anxious to have the Southern Pacific in line with other roads in connection with the subject of through bills of lading.

There will be a hearing at St. Louis, Feb. 10, in connection with the proposed advance of two cents per hundred pounds on shipments of hardwood lumber and lumber products from points in Arkansas and Louisiana to destinations in Missouri, Nebraska, and Kansas. There will also be a hearing at Memphis Feb. 13, in connection with the proposed advance of two cents per hundred pounds on shipments of hardwood lumber and lumber products from points in Arkansas and Louisiana to Memphis and from Memphis and Mississippi points to New Orleans. Lumbermen of Memphis will appear at both hearings and the cases will be managed by the Southern Hardwood Traffic Bureau. The lumbermen of this point and throughout the Memphis territory will co-operate with the officials of this organization and it is certain that a large delegation of lumbermen will attend as interested auditors or as witnesses.

J. H. Townsend has recently returned from Washington, where he went following the hearing at Cincinnati. He went to the capital city in connection with important rate matters and is quite busy making the necessary arrangements for the hearings already scheduled.

Northern Cut and Shipments for 1911-1912

The Northern Hemlock and Hardwood Manufacturers' Association has issued a statement of the cut and shipments of hardwood and hemlock

Jan. 1 to Dec. 31, 1911 and 1912. The report shows that there was a decrease in hardwood cut during 1912 as compared with 1911 of 10 per cent. On the other hand, there was an increase in hardwood shipments of 23 per cent. The decrease in hemlock cut during the same periods was 8 per cent and the increase in hemlock shipments 30 per cent. Thus the total decrease in hardwood and hemlock cut of 1912 as compared with 1911 was 9 per cent, and for the same years there was an increase in total shipments of 28 per cent.

During 1912 hardwood shipments exceeded hardwood production by 21 per cent and hemlock shipments exceeded hemlock production by 36 per cent; thus shipments of hemlock and hardwood combined exceeded production by 30 per cent.

The total stock of hardwoods held by sixty firms, sold and unsold, was, Jan. 1, 1912, 119,744,000 feet, and on Jan. 1, 1913, was 79,060,000 feet, a decrease of 34 per cent. The total hemlock stocks held by the same firms was, Jan. 1, 1912, 300,619,000 feet; on Jan. 1, 1913, 195,490,000 feet.

The proportion of total hardwoods on hand sold Jan. 1, 1912, was 45 per cent, and for Jan. 1, 1913, was 49 per cent.

Smithsonian Annual Report

The report of the Smithsonian Institute of Washington, D. C., for 1911 has been published. These reports are looked for each year by scientists who find in them summaries of progress during the preceding year in all lines of research. It is a sort of bringing up-to-date, a checking off, of the work of the world's greatest workers and thinkers. Among other interesting discussions and conclusions are these: Photographs by ultra violet light will show black as white and white as black; that there is only one known wild pigeon remaining in the world; that the age of the earth is between eighty and ninety million years; that some stars are so far away that their light requires 10,000 years to reach the earth, and that all stars are in motion; that the first use of iron seems to have been about 1,800 years B. C., and originated among the Mediterranean islands, probably in Crete; that some progress is being made in discovering the kind of oil used by the firefly to produce light; that forests once grew hundreds of miles north of the Arctic circle; and that the Kabyles of Africa are really white people tanned black by the sun.

Chicago Association Elects New Officers

On Monday, Jan. 27, the board of directors of the Lumbermen's Association of Chicago held a meeting for the purpose of electing officers for the ensuing year. F. L. Brown retired from two years of useful service as president of this association, and was succeeded by Murdock MacLeod of the Oconto Company.

V. F. Mashek was elected vice-president in place of Mr. MacLeod, while George J. Pope and E. E. Hooper were again elected treasurer and secretary, respectively.

After the election, President MacLeod called a meeting of the directors, in which they passed a resolution on the death of George Farnsworth of the Oconto Company.

Combined Interests

The Advance Lumber Company of Cleveland, O., and the West Virginia Timber Company of Charleston, W. Va., have just completed arrangements whereby the affairs of both companies will be materially increased. These two concerns are closely linked in a financial way.

The Advance Lumber Company is increasing its capital stock from \$331,000 to \$500,000. This will result in practically eliminating the wholesale and retail end of the business. As it is planned the Advance Lumber Company will then become the holding company of a number of important smaller concerns. Among these is the Baskin Lumber Company, Baskin, La., which concern now holds about 27,000 acres of yellow pine and hardwood timber.

The West Virginia Timber Company has headquarters at Charleston, W. Va., and mills at Vaughan, same state, and owns about 16,000 acres of timberlands in the vicinity of its mill. The principal growth is oak, poplar, chestnut and basswood.

The Horse Creek Lumber Company is another of the subsidiary concerns to the Advance Lumber Company. This company's operations are in Boone and Nicholas counties, W. Va. The Horse Creek Lumber Company controls 14,000 acres of hardwood timberland in the vicinity of Altman, W. Va.

This merging of interests will give to the organization a daily output of approximately 150,000 feet of hardwood, while the timberland acreage will, in the aggregate, be sufficient for ten years' cut.

George E. Brece of Charleston, W. Va., will be president both of the holding company and the West Virginia Timber Company. A. G. Webb of Cleveland will be vice-president and treasurer of both companies with his office at Cleveland.

The Porter Lumber Company Incorporated in West Virginia

The Porter Lumber Company is the style of a new incorporation which has started operations in the state of West Virginia. The company will manufacture lumber on a single band mill which is located at Chelyan, W. Va., on the main line of the Chesapeake & Ohio.

The company owns 17,000 acres of timber running mostly to oak and poplar. The balance is the regular proportion of West Virginia hardwoods. The mill will start cutting about April 1. The annual output of the plant will be in the neighborhood of 10,000,000 feet.

Hearing on Hardwood Rates from the South

The proposed hearing, which will be inaugurated by the Interstate Commerce Commission to take evidence in the investigation as to the reasonableness of shodder advances in rates on hardwoods from Arkansas, Louisiana and other southwestern points to Memphis, St. Louis and other points of destination, is being held at the Hotel Jefferson, St. Louis, Mo., today.

Committees for Wisconsin Association, 1913

President Hamar of the Northern Hemlock and Hardwood Manufacturers' Association has appointed the following committees on association work for 1913.

RAILROAD COMMITTEE.—W. G. Collar, Merrill, Wis., chairman; Murdock MacLeod, Chicago; Thomas Noble, Marquette, Mich.; W. J. Kessler, Eau Claire, Wis.; J. H. Johannes, Wausau, Wis.

LEGISLATIVE COMMITTEE FOR WISCONSIN.—W. A. Hill, Oconto, Wis., chairman; A. L. Osborn, Wausau, Wis.; C. H. Werden, Mason, Wis.; H. W. Moore, Fond du Lac, Wis.; H. H. Stolle, Trinoli, Wis.

LEGISLATIVE COMMITTEE FOR MICHIGAN.—T. A. Green, Ontonagon, Mich., chairman; John Pryor, Houghton, Mich.; R. E. MacLean, Wells, Mich.

ADVERTISING COMMITTEE.—M. P. McCullough, Schofield, Wis., chairman; W. B. Earle, Hermannsville, Mich.; J. W. Kaye, Westboro, Wis.; E. J. Gilleuly of Mellen, Wis., has been reappointed association auditor.

Panama Beetles Damage Veneer Logs

Last summer a shipment of logs from the west coast of Panama arrived at the plant of the Astoria Veneer Mills & Dock Company on the East river, Astoria, N. Y. In a short time millions of flying beetles were hatched from the cargo and circulating among the logs, and the yards of that company have sustained damages to the extent of between \$10,000 and \$25,000. As a result the Astoria Veneer Mills & Dock Company instituted a suit before the Queens County Supreme Court of Long Island, and asked damage from the shipping brokers handling the cargo, and also cancelled its contract with that concern, which contract gave it the privilege of storing its Panama timber shipments in the yard of the Astoria company.

Several other veneer concerns situated in the Astoria district adjacent to the Astoria veneer mills also experienced some damage from the depredations of the beetles. Among these were the George D. Emery Company, Uptegrove & Beckwith, Inc., Lewis Thompson & Co., J. J. Bonneau Company and E. L. Sinsabaugh.

State entomologist, E. P. Felt, in testifying, said that the scientific name of the beetles is *platypus punctulatus*. They are about one-eighth of an inch long and enter the logs through pin holes, but once inside they begin to make themselves at home by fitting up a series of chambers in which they lay their eggs. The complainants testified that if the beetles had been left to themselves they would probably have eaten up hundreds of thousands of dollars' worth of logs.

The cargo which brought the pest was of a wood somewhat resembling mahogany, which the shippers were anxious to have tested in the United States. The first cargo was received July 19, 1912, and by August 15 the whole lumber district was swarming with flying beetles. They were traced to the cargo of logs from Panama. For a short time the veneer mills were compelled to shut down, and before they got through with the pest it was found necessary to steam all the wood. Some of the yards threw their lumber overboard alongside the dock, and saved it by submersion. Liberal application of petroleum and the cold weather put an end to the pest, and the state entomologist testified that it is not likely they will make themselves felt again next spring.

Statement Lumbermen's Underwriting Alliance

The financial statement of the Lumbermen's Underwriting Alliance, U. S. Epperson & Co., attorney-in-fact, Kansas City, Mo., shows that organization to be in an excellent condition.

The company has assets on hand aggregating \$871,252.43. Of this cash in banks amounts to \$514,721.36, and the rest is made up of bond investments, including bonds of the state of Louisiana, the city of Dallas, Texas, Kansas City Terminal Railway, Sedgwick County, Kansas, city of Omaha, Neb., city of Los Angeles and Canada-Southern Railway Company. Accounts receivable, deposits in course of collection, etc., on Jan. 9 aggregated \$100,169.32.



MURDOCK MACLEOD, NEW PRESIDENT
CHICAGO LUMBERMEN'S ASSOCIATION

On the other hand, claims unadjusted are estimated at about \$8,804.11; administrative expenses aggregate \$19,625.22; surplus and re-insurance reserve amounts to \$842,823.10, making a total of \$871,252.43.

A summary of the percentage of operating expenses and fire losses shows operating expenses, twenty per cent; fire losses, twenty-two per cent; percentage saved to subscribers, fifty-eight per cent.

At the close of the fiscal year insurance in force at the Alliance was \$26,325,502.22. The loss claims paid aggregate \$117,001.98. This, with unadjusted claims, made the aggregate loss claims \$123,806.09. The net increase in insurance in force over the previous year was \$2,473,825.33.

The items of "surplus and re-insurance reserve" amounting to \$842,823.10, if divided as the law requires of stock companies, would be: Re-insurance reserve, \$287,263.86, and surplus to the credit of the Alliance policy carriers, \$555,559.24.

A gratifying feature of the record-breaking loss ratio is the fact that few Alliance subscribers suffered heavy individual losses that attend disastrous fires, and of all the sawmills insured by the Alliance only two were burned during the year, all the other losses being of minor consequence.

Building Operations for January

Official reports from some fifty cities throughout the United States, as compiled by The American Contractor, Chicago, show an aggregate gain in building operations of 12 per cent for January, 1913, as compared with January of the past year. Thirty-six of the cities listed scored an increase and fourteen a decline from the January 1912 figures. Gains of over 100 per cent were made in: Cedar Rapids, 166 per cent; Chattanooga, 122; Chicago, 252; Cleveland, 114; Columbus, 108; Detroit, 226; Manchester, 139; Milwaukee, 381; Nashville, 198; Newark, 124; St. Joseph, 147; Scranton, 207; Toledo, 227. Particulars will be found in the following table:

CITY	January 1913 Cost	January 1912 Cost	Per Cent Gain Loss
Akron	208,230	121,450	71
Atlanta	395,005	294,295	34
Baltimore	635,670	469,166	38
Birmingham	362,623	243,277	49
Buffalo	478,000	427,000	11
Cedar Rapids	143,000	50,000	166
Chattanooga	108,725	48,895	122
Chicago	7,041,600	1,999,300	252
Cleveland	704,740	328,107	114
Columbus	208,335	99,930	108
Denver	181,600	327,650	44
Detroit	2,029,605	602,285	236
Duluth	68,675	67,625	1
Grand Rapids	81,625	78,885	3
Harrisburg	54,475	36,675	48
Hartford	191,750	157,185	21
Kansas City	569,405	426,851	33
Los Angeles	2,078,736	2,456,872	15
Louisville	217,250	197,570	9
Manchester	217,250	20,185	139
Milwaukee	441,211	91,630	381
Minneapolis	319,575	264,355	20
Nashville	100,457	33,698	198
Newark	1,340,339	589,401	124
New Haven	612,218	391,183	56
New Orleans	237,842	288,685	17
Manhattan	4,740,786	6,947,250	31
Brooklyn	3,213,091	2,057,947	56
Bronx	1,716,088	3,442,754	50
New York	9,669,965	12,447,951	22
Norfolk	159,064	349,330	54
Oakland	586,288	326,712	79
Omaha	160,725	134,850	19
Paterson	93,148	99,143	6
Philadelphia	1,556,740	1,250,220	24
Pittsburgh	385,488	256,359	50
Portland	1,126,345	906,623	24
Rochester	445,181	255,629	74
St. Joseph	25,095	10,150	147
St. Louis	616,869	3,418,032	81
Salt Lake City	155,414	235,050	33
San Francisco	2,061,001	1,870,617	10
Scranton	186,278	60,660	207
Seattle	560,775	774,810	27
Shreveport	74,133	104,687	29
Spokane	25,730	83,438	69
Toledo	374,906	114,485	227
Washington	707,262	757,954	6
Wilkes-Barre	82,329	41,670	97
Worcester	159,222	131,440	21
Total	\$38,071,007	\$33,732,915	12

Will Build Sawmill

The H. B. Blanks Lumber Company, whose headquarters are at Brunswick, Miss., with branch offices and distributing yards at Cairo, Ill., and Vicksburg, Miss., recently purchased from the Issaquena Land & Lumber Company a large tract of land for \$83,000. The company will erect a sawmill near Cary, Miss., at a new town to be known as Issaquena, located on the Yazoo & Mississippi Valley road. A railroad is being built through the property.

Opens Wholesale Department at Detroit

The Yeomans-Diver Company has added a wholesale lumber department to its already extensive box and crating business at Detroit, Mich. The new department will be under the management of President John M. Diver, who prior to 1901 was connected with the old Cleveland Saw Mill Company of Cleveland, O., and recently resigned as president and general manager of the Cleveland-Sarnia Sawmills Company, Ltd., of Sarnia, Ont., which corporation he entered in 1901.

The new company will handle all kinds of lumber from the southern and western states as well as white pine, Norway and spruce from

Canada, and special bills of lumber, lath and shingles.

Mr. Diver is well-known to the lumber trade throughout the United States and Canada, and his successful handling of his former duties assures him a success in the new undertaking.

The company's property is situated at the foot of Lieb street, Detroit, and covers an area of about four acres.

Insurance Company Makes Good Showing

At the annual meeting of the Pennsylvania Lumbermen's Mutual Fire Insurance Company, held in the company's office in Lafayette building, Jan. 28, the following directors were elected for a term of four years: Edwin H. Coane, R. K. Griswold, Wm. O. Curtis.

The auditors elected were: Emil Guenther, Myron J. Kimball, Clayton W. Nichols.

The officers elected for the year 1913 are as follows:

PRESIDENT, Edward F. Hobson.
FIRST VICE-PRESIDENT, Richard Torpin.
SECOND VICE-PRESIDENT, W. Z. Sener.
TREASURER, Edwin H. Coane.
ASSISTANT TREASURER, James S. Young.
SECRETARY, Harry Humphreys.
MANAGER AND ASSISTANT SECRETARY, Justin Peters.
ASSISTANT MANAGER, H. J. Pelstring.

Last year was the best year in the history of the company for new business. The amount written was over \$2,500,000, making insurance in force about \$19,000,000. The surplus was increased \$34,000, making present surplus \$376,048. The directors advised and ordered the continuance of a 40 per cent dividend on all policies that will expire or terminate during the year 1913. The prospects for the year 1913 are very bright. January has shown up exceptionally well for new business. The statement of the company as of date Jan. 1, 1913, follows:

STATEMENT, JANUARY 1ST, 1913

CASH ASSETS	
Approved Stocks and Bonds	\$ 500,390.00
First Mortgage Loan on Real Estate	3,500.00
Cash in Office	634.25
Cash in Banks on Interest	73,560.96
Premiums Due (not over 3 months in arrears)	26,841.26
Agent's Balance	733.08
Interest Due or Accrued	7,160.66
Total Cash Assets	\$ 612,820.21
LIABILITIES	
Losses in process of adjustment	\$ 23,750.27
Taxes and other bills due or accrued	4,776.76
Inspection charges due on premiums in course of collection	1,614.61
Unearned premiums on policies in force	206,629.94
Total Liabilities	\$236,771.58
NET CASH SURPLUS	\$ 376,048.63
ASSETS AS TO POLICYHOLDERS	
Total Admitted Cash Assets	612,820.21
Less Liabilities, except unearned premiums	30,141.64
Contingent Assets, i. e., extent of power to assess	1,239,779.64
Making total strength back of policies in force as of this date	\$1,822,458.21
Insurance in force	\$18,924,111.23
Premiums in force	\$ 413,259.88

Pease-Strang

George D. Pease and Miss May Caroline Strang, daughter of Mr. and Mrs. R. S. Strang of Chicago, were married on Feb. 1, by the Rev. William Chalmers Covert of the First Presbyterian Church of Chicago. Mr. Pease is at the head of the circulation department of the AMERICAN LUMBERMAN, having been in the employ of that organization for a considerable length of time. He started his business career in the employ of one of the papers which was eventually amalgamated with one other publication, to form the present organization.

Mr. Pease, or as he is more popularly known, "Jack" Pease, has an extensive coterie of friends in the lumber trade, who will unite in offering congratulations.

Death of Herman H. Hettler, Jr.

Herman H. Hettler, Jr., son of Herman H. Hettler, head of the Herman H. Hettler Lumber Company, Chicago, died at St. Lukes Hospital, Chicago, on Saturday, Feb. 1, after an illness of a week following an operation. The funeral was held on Monday, Feb. 3, from the family residence, 567 Hawthorne place, Chicago. The interment was at Graceland Cemetery.

The deceased was graduated from the Chicago Latin School and would have entered Yale University next fall.

New Louisiana Hardwood Concern

The St. Landry Realty Company has been formed at Port Barre, La. It will manufacture hardwoods and give particular attention to the export trade. C. E. Borah is president of the new concern; Joseph Birg, vice-president; George D. Palfry, secretary; H. S. Palfry, treasurer, and A. J. McCausland, general manager. These with John D. Bell, A. M. Underwood and S. W. Futral, comprise the board of directors. Mr. McCausland has had many years' experience in this line of trade.

The company owns about 18,000 acres of timber made up of white ash,

red and white oak and red gum, this including the timberland recently purchased from the old Port Barre Lumber Company.

The mill will soon be erected, and it is expected will be ready for operation in about ninety days, with a daily capacity of 60,000 feet.

Harvard Forestry School Bulletin

The official register of the Harvard University School of Forestry has just been issued from that institution. The register contains notices of the arrangements whereby pupils may gain access to the Harvard School of Forestry. It reviews the Harvard curriculum which covers two years and is designed to give the student a thorough course in technical forestry. Membership in the school of forestry is open to graduates of colleges or scientific schools. The curriculum includes various subjects covered in the usual course of forestry and intermingled with it are excursions on the part of the students to various woodlands adjacent to Cambridge. The school has been donated several tracts of timber, on one of which it runs a sawmill and maintains a lumber yard, the students camping at the operations.

Purchases Large Tract of Timber

The holdings of the Wayne Land & Lumber Company and the property of the Williamsville-Greenville & St. Louis Railroad, lying in Wayne county, Mo., have been purchased by a syndicate of Canadian lumbermen. Eighty-six thousand acres of iron ore land and hardwood timberland go with the deal.

The new company is composed of James W. Sanderson of Vancouver, John and Donald McLean of Winnipeg; E. N. Mayland, Winnipeg; H. W. Laird, Regina; Robert Slowe, Montreal; L. F. Woodman, Toronto; Thomas Rogers, Mexico, Mo., and D. W. Adams, Prince Albert, Alberta.

The holding company will be organized at Montreal, which will own the Wayne Land & Lumber Company and the Williamsville railroad. The company will be backed with sufficient means to operate the two properties, and it will also have the power to dispose of them if such a course seems best.

The property lies east of the Iron Mountain Railroad in Wayne county, and the road extends from Williamsville through Greenville to Cascade, Mo. The property has been developed at times by the Holliday-Klotz Lumber Company, and later by R. A. Long of Kansas City. Several productive mines are open on the property, and for a time ore was shipped to furnaces in St. Louis. In 1910, Mr. Long sold to C. W. Hayes and James Cowan, both of whom now retire from interest in the property.

It is said that the new company liquidated all obligations of the two concerns and acquired the property for less than \$200,000.

The Passing of a Veteran

George Farnsworth, retired president of the Oconto Company and the Bay de Noquet Company of Oconto, Wis., and Chicago, and Nahma, Mich., respectively, passed away at his home in Chicago on Jan. 26, 1913. Mr. Farnsworth was one of the pioneers in the white pine industry, and operating in this line and later going somewhat into the production of hardwood and hemlock, he became one of the strongest and most widely recognized of the old school of northern lumbermen. While essentially a white pine operator, the deceased, through his interest in the Oconto Company, was generally known throughout the northern hardwood manufacturing sections.

Mr. Farnsworth was born May 22, 1825, at Fairfax, Vt. He was descended from Anglo-Saxon and Scottish parentage, and in addition to receiving a tribute of courage and foresightedness, he also received as a heritage from his father the lumberman's instinct. The father of the late deceased was at one time occupied in rafting timber from Lake Champlain to the Montreal and Quebec markets.

George Farnsworth was at an early age forced into the world to make his own way. He started his commercial life in a village store at Burlington, Vt. At the age of fifteen he came west, and after considerable knocking about he again secured employment in a small store. Eventually he landed at Racine, Wis., and found employment in a lumber yard. In the course of time he was taken into the office. At the age of nineteen he bought the yard and went into partnership with Horatio Munroe. His partner retired at the end of the first year, which was profitable, and Mr. Farnsworth then went into the sawmill business at Muskegon, Mich. The succeeding years were marked by investments in timberlands and gradual advancement in his manufacturing interests. In 1858 he bought a half interest in a mill at Oconto, Wis. The company was later incorporated as the Oconto Company, with Mr. Farnsworth as its first president. He held this office until 1886 when he retired from active business life.

The Bay de Noquet Company was a subsequent enterprise, of which Mr. Farnsworth held the titular office of president.

The deceased lived at 1421 Astor street, Chicago. He leaves a wife, one son and three daughters. His son, George J. Farnsworth, is now president of the Oconto Company.

Instructions for Selecting, Laying and Caring for Hardwood Floors

Cobbs & Mitchell, Inc., and the Mitchell Brothers Company of Cadillac, Mich., have jointly issued a booklet entitled "Modern Hardwood Floors, and How to Get Them." The book is in pamphlet form and gives instructions for selecting, laying, finishing, caring for and re-finishing hardwood floors. The contents tell of the proper under floors and the proper selection of the top layer; also gives instructions as to the condition of the flooring before it is laid, and tells just how to lay the top floor. There

are also paragraphs on the use of fillers and stains which go into the finishing process in detail, telling how to finish with oil, varnish and wax, and giving the advantages and disadvantages of the three methods and of a combination method. Under the section covering the care of hardwood floors, proper methods of caring for floors finished with oil and varnish are given, as also are suggestions as to care of floors finished with wax. Minute instructions as to repairing and re-finishing fine hardwood floors are included in the pamphlet.

The book is well illustrated with cuts showing the different methods of laying floors, giving suggestions as to designs, the proper type of nails to be used, and the right way to lay flooring around objects such as registers, in order to make a workmanlike job. In short, the pamphlet contains all information that would be of practical benefit to the user of hardwood flooring, and is to be had for twenty-five cents from either of the above companies.

Late Glasgow Market Report

The hardwood market of this section is decidedly healthy. The prevailing conditions are now about normal and prospects of a continuation of favorable conditions are encouraging. Imports are still on a meagre scale—comprising spruce deals from Halifax and Portland. These have been easily disposed of without recourse to storing, and unusually high prices have been paid. The quality of some of the parcels of spruce has been so poor that they are unfit for box making. Birch planks have also been imported and no difficulty was experienced in selling them, owing to the bareness of the market. A few contracts for birch planks have been made this week and some difficulty may be found in completing delivery as reports from the other side say that there is likely to be a shortage.

The various Quebec shippers are now due on their annual visit but it is feared that contracting will be no easy matter. With the high f. o. b. prices and present freights the position of merchants is most difficult. Some of the larger merchants have still a quantity of last year's import on hand and no immediate prospect of selling. The advanced freight rates have not yet been felt as regards American hardwoods but this is due to the fact that these rates arranged by yearly contract operate as from Jan. 1, so that shipments after that date and only now due will naturally be much higher. In the case of pitch pine quotations have been lower than for some time and of course this naturally leads one to believe that freights are on the decline. It is quite natural to expect that slight fluctuations will take place from time to time but not to any great extent for some time yet. Many parcels of pitch pine are being transhipped just now from the Continent to the various ports in the East coast and many other parcels in prospect with the result that these markets are kept well supplied. Transshipment freights meantime, however, are difficult to obtain owing to the Board of Trade regulations debarring deckloads.

The S. S. "Kassanga" arrived last week from New Orleans with the usual varied cargo consisting of mahogany, ash and hickory logs and gum, oak and pitch pine lumber. Several parcels of pitch pine logs came in under deck and are reported to have been sold at good figures.

The S. S. "Indrani" and S. S. "Kastalia" have arrived from Newport News and Baltimore respectively with unusually small cargoes of hardwoods, comprised largely of oak planks, chiefly on contract for the railway companies and wagon builders. The quality of the planks is well over the average and there should be very few rejects. Plain oak boards are becoming scarce and higher prices are in command.

At present the docks are in a great state of congestion owing to the carters' strike. Goods cannot be removed from the quay with the result that each succeeding steamer adds to the congestion. Both sides are adhering firmly to the attitudes they have adopted and the chances of an early settlement are still remote. The curtailment of transport facilities is having a serious effect on all trades and many places will require to close down for want of material.

Big Car Order by Pennsylvania Road

Bids have been requested by the Pennsylvania Railroad System for the construction of 12,300 freight cars, at an aggregate cost of about \$16,000,000. Ten thousand of these cars will be additions to present equipment, and the remainder will represent displacements. Of the latter, however, all will be about 40,000 pounds greater in capacity than the cars which they displace. The whole of the new order will represent an increase in total capacity of the road's freight car service of about 546,000 tons.

The cars are distributed over the Pennsylvania System as follows: For the lines east of Pittsburgh: 5,000 steel gondola cars, 1,300 wooden side gondola cars, 1,000 refrigerator cars. For the lines west of Pittsburgh: 3,000 steel gondola cars, 1,000 wooden side gondola cars, 500 refrigerator cars, 500 box cars.

The new orders will be in addition to orders placed during 1912.

Publicity for Government's Trust Investigation

The Bureau of Corporations of the Department of Commerce and Labor has issued complete statistics and data covering the findings of the investigation to determine the existence or non-existence of a lumber trust.

According to one part of the report dealing with timber and standing timber, there is a grand total of 2,826,000,000,000 feet in continental United States, including Alaska. Of this 2,196,000,000,000 feet is privately owned. In the Pacific coast region there are 1,013,000,000,000 feet of standing timber, and in the southern pine region 634,000,000,000 feet.

The total estimated footage standing in the National forests is 539,000,000,000 feet, and the total owned by the government, by states and on Indian reservations is 90,000,000,000 feet.

Eleven groups are shown as owning varying amounts of the standing timber of the country. The largest group owned is from 13,000,000,000 to 25,000,000,000 feet, and the smallest less than 60,000,000,000 feet. In the first group are included the Southern Pacific Company, the Northern Pacific Railroad Company, and the Weyerhaeuser Timber Company.

In speaking of the rise in value of standing timber during the last twenty years, the report says that the increase has been nothing less than enormous. For southern pine varying reports have shown an increase in value during the last twenty years as follows: From \$0.12½ to \$4 a thousand; from \$0.10 to \$3 a thousand feet; from \$5 to \$20 an acre; from \$1.50 to \$20 an acre.

The report says that the original Federal grants to the North Pacific and to the present railroads of the Union Pacific Southern Pacific System—alone amounted to over 90,000,000 acres of land, and of this nearly 69,000,000 acres have already been patented, and that the remainder will ultimately be obtained.

The Weyerhaeuser Timber Company now owns 1,945,000 acres. In Florida 182 holders have 16,990,000 acres of land, of which 4,200,000 acres are owned by only three holders. The holdings of this group of Florida owners have 60,000,000,000 feet of standing timber on it.

Late Liverpool Market

The market position is quite brisk again, with a fairly large volume of trade. Prices, on the other hand, can hardly be described as firm as in the later months. In fact, there has been a distinct tendency toward slump in one or two directions. One might point to hickory as a typical example. Last November buyers were tumbling over one another to buy at 2s, but this week wood was on offer without being purchased at 2s 9d. Present requirements are just being met and buyers have been led to believe by the heavy shipments on consignment that there is a lot of wood on offer, which accounts for the present weak position which is typical of many other items also.

The mahogany sales last week were very well attended and prices were well maintained on the current high level. Sound ash is a very good point. The price asked by brokers for forward delivery is 2s 6d per cubic foot, although it is thought this price has not been paid nor will be paid. However, something about 2s 4d would get orders. Round oak has been rather overdone and shipments are not recommended. The prices of other stocks are much as previously reported and no great change has been noted.

A Publication of Beauty

"Steam Machinery" is the name of a publication of unusual merit, the first issue of which has just come from the Steam Machinery Publishing Company of Duluth, Minn. The purpose of the magazine is revealed by the title.

The first issue is a beautiful exposition of the possibilities of the printer's art. It is printed on high quality paper and gotten up in an unique and effective style, each page of printing being inserted in a panel surrounded by a border of delicate brown tint. An effective design is run on the front cover, and the whole is pleasingly illustrated with catchy sketches.

New Arkansas Hardwood Mill and Oak Flooring Factory

A strictly up-to-date sawmill is now under construction at Pine Bluff, Ark., by the Saline River Hardwood Company, which is allied with the Arkansas Short Leaf Lumber Company, one of the subsidiary concerns of Long-Bell Lumber Company. The mill is being built and the operation will be in charge of Howard W. Coles, formerly manager of the Bliss-Cook Oak Company of Blissville, Ark., and more recently in charge of one of Long-Bell's southern yellow pine mills.

The new hardwood plant at Pine Bluff is intended to be a model one in every respect. The frame is massive and the equipment will be furnished by the Filer & Stowell Company of Milwaukee, Wis.

The Saline River Hardwood Company has hardwood timber holdings of upwards of 30,000 acres, which runs very heavily to forked-leaf white oak, the best type of oak growing in the South, and a considerable percentage of red gum.

As an adjunct to the mill there will be an oak flooring plant, with which line of production Mr. Coles is not only thoroughly familiar, but an expert. Also involved in the details of the operation, the company is putting in a wood steaming cylinder manufactured by The Kraetzer Company, Chicago, to secure prompt and accurate drying of its hardwoods, and the oak utilized in the flooring plant will have a subsequent dry-kilning through a battery of kilns that are also being built. This will be the first plant in the country to eliminate entirely the lumber yard per se, as the output will be stuck on trucks at the chains, forwarded to the steaming cylinder and a large portion be advanced onto storage tracks for blowing out in the open, while the remainder of the lumber will go to dry-kilns and from there by means of transfers from the tail-end of the kilns be forwarded some two hundred feet to the flooring factory.

Other hardwood manufacturers are watching with marked interest this distinct evolution and advancement in lumber handling methods. It is thoroughly believable that in low cost and efficiency the new plant Mr. Coles is installing at Pine Bluff will involve the cheapest, most expeditious and satisfactory hardwood operation in the United States.

Timber Purchased by William Whitmer & Sons

A timber area aggregating 15,000 acres in Pennsylvania designated as the "Washington Furnace" tract is reported to have been purchased by William Whitmer & Sons, Inc., of Philadelphia. The transaction was made by the American Estates Association of New York and is the result of negotiations that have been under way for some time.

It is stated that the company will develop the tract by installing a plant and will utilize the water power obtained from a small stream running through its land.

Meeting of St. Louis Club

Many innovations to benefit the Lumbermen's Club of St. Louis were suggested and endorsed by the members at the regular monthly dinner and business meeting of the club, held Feb. 4, at the Mercantile Club. Among them were free information to be furnished through the secretary in regard to traffic matters such as rates, demurrage, switching charges, expense bills, railroad claims, as well as legal advice and notary public services.

The chairmen of the various committees also reported the plans they had mapped out for the coming year.

The speaker of the evening, Eugene Hale, a member of the Municipal Assembly, gave a talk on The Municipal Situation, as Viewed from a Legislative Standpoint.

During the evening W. E. Barns read a forestry bill, which will be presented to the Missouri legislature. The bill has been presented by Mr. Barns to the Southwestern Lumbermen's Association and has been endorsed by it. He offered the following resolution, which was passed:

WHEREAS, Most of the states have given careful and intelligent attention to the conservation of the forest resources by the preparation of authentic inventories of their standing timber, by the acquisition of non-agricultural cut-over lands as a basis for reforestation, by the organization of forestry boards and the employment of trained foresters and the education of public sentiment along conservative lines; and

WHEREAS, The members of the Missouri State Board of Forestry, who have served in this state for eight years past without a cent of expense to the state, now earnestly desire the co-operation of all good citizens in securing the passage of the bill before us at the present session of the Legislature,

RESOLVED, That the Lumbermen's Club of St. Louis heartily endorse this bill and recommend its adoption as a measure that will bring Missouri into line with her sister states and the national forest policy.

By a unanimous vote the bill was referred to the committee of public affairs with authority to act.

The statistical committee of the club will figure up the St. Louis lumber statistics and the data furnished by it will be given out later on and will be distributed broadcast so as to show that St. Louis is the logical lumber center.

Twenty-one new members were elected to membership.

The entertainment committee announced what it intended furnishing in the way of entertainment to the members during the year.

The meeting was one of the most enthusiastic held for some time and from indications the club this year will be one of the most prominent lumbermen's clubs in the country, not only in membership but in the good it will do for the lumber fraternity.

Hardwood News Notes

< MISCELLANEOUS >

The Conneaut Lumber Company has increased its capital from \$10,000 to \$25,000.

The Timber Products Company has been incorporated at Chicago with a capital of \$35,000.

The Derry Lumber Company of Saginaw, Mich., has increased its capital stock to \$25,000.

The Original Cabinet Company has been incorporated at Evanston, Ill., with a capital of \$12,000.

The Blue Ridge Lumber Company, Neola, W. Va., was incorporated at \$217,000 to develop timberlands.

The Arkansas Mill & Lumber Company is incorporated at Little Rock, Ark., with a capital of \$100,000.

The Sicklesteel Lumber Company has been incorporated at Detroit, with a capital stock of \$20,000.

The Nassau Milling Company has been incorporated at Hemstead, N. Y., with a capital of \$50,000.

The Moline Wagon Company of Moline, Ill., has decreased its capital stock from \$1,000,000 to \$600,000.

The Kent Furniture Company of Lenoir, N. C. has changed its name to the National Furniture Company.

The J. H. West Lumber Company of Warren, Pa., has increased its capital stock from \$50,000 to \$100,000.

The Hamilton Ridge Lumber Corporation is a new concern at Richmond, Va., with a capital stock of \$500,000.

The Breece Manufacturing Company, Portsmouth, O., has increased its capital stock from \$100,000 to \$300,000.

The project of building another railroad across New York state, to be

known as the Buffalo, Rochester & Eastern, has again been brought forward, and one of those interested in the plan is J. N. Scatterd. When it was brought up before it was vetoed by the Public Service Commission, which declared it unnecessary, but many shippers of fruit and other merchandise say they are unable to get cars enough at some seasons from the New York Central and that a new road is much needed.

B. F. Ridley of Davenport & Ridley recently returned from a business trip of several weeks in the South, where he bought stocks of oak, chestnut and poplar for the Buffalo yard.

Blakeslee, Perrin & Darling state that the hardwood demand is very good for this season and that all sorts of stock have been moving freely during the past few months.

H. A. Stewart returned early this month from a business trip to West Virginia. The yard of I. N. Stewart & Bro. is moving considerable plain oak, which is bringing quite an advance over a few months ago.

T. H. Wall was in attendance at the retail lumber convention at Utica late last month. M. M. Wall is now at Mt. Clemens, Mich., where he will take a brief rest away from the lumber business.

Anthony Miller reports the hardwood business as picking up some, after a rather quiet start early in the month. His yard is receiving good stocks in a number of different hardwoods.

A. W. Krieheder is contemplating a trip South in the near future to look after the large oak and chestnut shipments which are coming into the Buffalo yard of the Standard Hardwood Lumber Company.

W. K. Jackson of Jackson & Tindle, has returned from a business trip to the Michigan mills of the firm. He reported a great lack of snow for logging in some parts of that state.

The yard of T. Sullivan & Co. is getting in a good assortment of maple in two to three-inch thickness and also quite a quantity of brown ash. Prices are reported upward bound.

Hugh McLean has returned from an eastern business trip. The office states that the demand for oak continues active, especially in plain, while quartered is also showing better sales.

◀ PHILADELPHIA ▶

Frederick S. Underhill of Wistar, Underhill & Nixon, reports accelerated trading, with all signs propitious for a prosperous new year.

The Abbott-Carnell Company, 259 and 261 Bullitt-building, composed of John F. Abbott and Thomas L. Carnell, is practically a new concern. Operating in the West Indies, Central and South America, it handles veneer and fancy hardwoods, among which it lists mahogany, ebony, Spanish cedar, lignum-vitæ, mahoe, greenheart and bullet. Mr. Abbott reports the mahogany business very active at this time. The company cuts the stuff and furnishes it to the wholesalers.

E. S. Nail, president and manager of the Lumbermen's Mutual Insurance Company, Mansfield, O.; W. S. Parker, Finley, O.; and J. W. Frankeberger, Mansfield, O., directors of the company, were guests of the Pennsylvania Lumbermen's Mutual Fire Insurance Company, at their annual meeting Jan. 28. Justin Peters, the popular manager of the Pennsylvania concern, attended the nineteenth annual meeting of the Retail Lumber Dealers' Association of New York, which was held in Utica, N. Y., on Jan. 29 and 30. On this occasion the Pennsylvania Lumbermen's Mutual Fire Insurance Company and its affiliating mutual companies donated a handsome souvenir booklet containing menu, etc.

The J. W. Turnbull Lumber Company has moved to its new offices, 807 and 808 New Stock Exchange building, where it will have better facilities for handling enlarged business.

The Lance Lumber Company, West Reading, was adjudged an involuntary bankrupt Jan. 31. Referee, Samuel E. Bertolet.

The American Chair Company, Trenton, N. J., was incorporated under New Jersey laws Jan. 24, with a capital stock of \$5,000.

The Leraysville Furniture and Toy Company, Leraysville, Pa., obtained a charter under Pennsylvania laws Jan. 28; capital, \$15,000.

J. N. Holloway of the Imperial Lumber Company reports steady trading, with every indication of a big year for the lumberman.

Rayner & Parker, composed of R. B. Rayner and H. G. Parker, are the successors to R. B. Rayner & Co.

◀ PITTSBURGH ▶

A number of traffic men of the Pittsburgh Wholesale Lumber Dealers' Association attended the annual banquet of the Traffic Club of Pittsburgh at the Hotel Schenley, Jan. 30, where they were highly entertained. Arthur Brisbane, the New York editor, was the first speaker of the evening and argued that railroads are in a position to do very much more for their clients and for the people in general than they have been permitted to do and that the prosperity of the railroads has much to do with the prosperity of the nation.

The Pittsburgh Industrial Development Commission has landed two more plants for this city, both of which will use considerable hardwood in building and manufacturing operations. One is the Hanlon-Gregory Galvanizing Company, which will build a big plant at Twenty-fourth street and the A. V. R. R. The other is the National Tag & Manufacturing Company, which will locate at Parnassus, a suburb of this city.

The Mead & Speer Company, one of the well-known hardwood concerns of this city, is closing out its business at 6048 Jenkins Arcade. It closed

up its lumbering operations at Strange Creek, W. Va., some time ago and is tearing up its railroad there now.

The Warren Table Works at Warren, Pa., will build a three-story addition to their plant this spring to take care of the rapidly increasing business.

The Crescent Lumber Company is doing a nice business in poles, piles and ties. It finds difficulty in getting stock promptly to supply its trade.

The Morland-Ricks-McCreight Company is enlarging its business and has added to its force of salesmen Alexander Gordon, who was for eleven years in the employ of the Babcock companies in this city.

The Commercial Lumber Company, Youngstown, O., has just received its charter with a capital of \$40,000. The members are M. Lee Gailey, John I. Gailey, William Orr, J. Dale Gailey and A. C. Cook.

Joseph J. Linehan has moved his office to 816 Fulton building where he is handling the stocks of the Mowbray & Robinson Company and finds little difficulty in bringing in a good trade.

The Duquesne Lumber Company is making splendid headway with its mammoth operation at Braemar, Tenn. G. C. Adams, sales manager of this city, has been in the East the past few days and finds a good strong market there.

◀ BOSTON ▶

The Massachusetts Wholesale Lumber Association held its annual meeting and banquet at the Exchange Club, Boston, Jan. 29. Several matters of importance were discussed, among them the several bills before the Massachusetts legislature this year which directly affect the lumber industry. The Massachusetts Wholesale Lumber Association and the Lumber Trade Club of Boston have joined together to fight these bills before the committees and to carry the fight further if necessary.

It was also voted to join with the Lumber Trade Club in having a ladies' night later in the season.

The officers elected were as follows: President, William E. Litchfield; vice-president, Charles S. Wentworth; secretary and treasurer, E. C. Hammond; assistant secretary and treasurer, A. W. Moore; executive committee, Harry B. Clark, chairman, H. W. Blanchard, Morris A. Hall, Frank W. Page, H. B. Stebbins, E. O. Lake, Frank P. Huckins, H. B. Fiske, T. A. Shepard and Martin A. Brown.

The Woodstock Lumber Company of Boston has purchased additional timberlands in Canada from the Missiquet Lumber Company.

William E. Litchfield, the well-known hardwood lumber manufacturer and dealer, Boston, was appointed delegate from the Boston Chamber of Commerce to the National Chamber of Commerce at Washington.

◀ BALTIMORE ▶

The Baltimoreans who attended the annual meeting of the National Lumber Exporters' Association at Chatanooga Jan. 23 and 24 report that the annual was the most largely attended in the history of the organization and that the interest shown in the proceedings is a gratifying indication of the growing influence of the organization. The renewal of the contract with Frank Tiffany, the foreign representative, with headquarters in London, is regarded as among the most important matters disposed of. Mr. Tiffany's work has been eminently satisfactory and he is held to have met every expectation entertained. Through his efforts better relations have been established with the foreign brokers and buyers than ever before existed, while at the same time his tact and energy have saved the shippers considerable money. One result of the better understanding has been the prompt settlement of cases involving claims on the ground that lumber shipped did not come up to grade.

A certificate of an increase in the capital stock of the Maryland Land and Lumber Company has been filed for record at Dover, Del., where the company was incorporated on Nov. 12, 1912, with a capital stock of \$100,000. The increase is to \$3,000,000. The incorporators are H. Ralph Ewart, Clarence J. Jacobs, and Harry W. Davis, all of Wilmington, Del. The office of the company is in the Delaware Trust Building at Wilmington. Richard L. Tilghman is president of the company, and H. Webster Smith is secretary.

David T. Carter & Co., hardwood wholesalers and exporters, are experiencing such an increase in their business that they have found it necessary to get larger offices. They have moved from the tenth to the ninth floor of the Calvert building, Fayette and St. Paul streets.

David Sterritt McNitt, a director of the Maryland Lumber Company, which has its headquarters at Hagerstown, Md., and operates a sawmill at Denmar, W. Va., died in a hospital at Lewistown, Pa., last week of injuries received when he was struck with the broken end of a steel cable and hurled to a ledge of rock.

Mr. Howie of Wright, Graham & Co., of Glasgow, Scotland, who has been making a trip of the lumbering sections of the eastern states during the last month or so, stopped here on his way back to New York last week, preparatory to taking the steamer for home. He complained that the price of hardwoods had been advanced to such figures as to check the export movement and compel the foreign yards to hold back and supply only their most imperative necessities.

Herman D. Billmeyer of the Billmeyer Lumber Company, of Cumberland, Md., which makes a specialty of bridge and ship timbers, is a candidate for the postmastership of that town. President Taft recently appointed a successor to Postmaster Pearre, but the Senate Democrats, in

accordance with the plan adopted by them, are holding up the appointment, together with a number of others, intent on Wilson filling any vacancies that may arise between now and March 4. Mr. Billmeyer is a very successful business man and has excellent backing.

James Baer of Richard P. Baer & Co., Maryland Casualty building tower, recently returned from a business trip to northern New York and Canada. He states that he found business everywhere in excellent shape, the yards taking stocks with much freedom, and prices remaining not only firm, but showing a tendency to advance. Oak in particular proved to be in strong demand, with the buyers ready to pay any reasonable figure to get suitable supplies.

The R. E. Wood Lumber Company is making rapid progress with its new mill in Swain county, North Carolina, which is to take the place of the plant on Eagle Creek, operated for some years. It is expected that the mill will be in operation in about ten days or two weeks.

◀ CINCINNATI ▶

The Thompson Hardwood Lumber Company reports business much improved over a couple of weeks ago. Roy Thompson states that prices are very firm, and on some of the upper grades he expects an advance before July, while the lower grades are strong.

Fred Mowbray of the Mowbray & Robinson Company says that business is very good. All of the company's mills are running to capacity. Mr. Mowbray thinks that prices will not be any lower, and advises buyers to buy now.

At the big hardwood plant of the M. B. Farrin Lumber Company, Sales Manager Sterrett said that while prices on worked stock are not high enough in comparison with the cost of rough material, there is no complaint to make now. He predicts a general stiffening up in all items such as this mill produces. Flooring is in good demand at satisfactory prices and the lumber end of the business is more than satisfactory.

The Kosse, Shoe & Schleyer Company, exporter of hardwoods and specialist in black walnut, says there is every reason to look forward to a very satisfactory market condition during this year, both in this country and abroad. It is well supplied with orders at present and expects much increased demand as the season grows. Prices obtained are very satisfactory.

Cliff S. Walker, president of the Bayou Land and Lumber Company, has been confined to his home for the past several weeks. For some time Mr. Walker has not been in good health and his badly rundown condition, without the rest that he should have taken long ago, has resulted in a general break-down that has taken some time to mend. His many friends are rejoicing in the good news that he is gradually recovering his strength and that by the time good weather comes along "Cliff," as he is affectionately called, will be out again. He is contemplating a long rest and will likely take a long trip just as soon as he is able to get out.

◀ COLUMBUS ▶

The mild weather which prevailed during the month of January favored active building operations, as is shown by the report of the city building inspector. During the month the number of building permits issued was 105 as compared to 66 for January of a year ago. The valuation of the buildings projected was \$208,335 as compared with \$99,930 in January of last year.

A state chamber of commerce is to be organized for concentration of public opinion upon questions affecting the financial, commercial, civic and industrial interests of the state. A committee appointed has drawn up by-laws of the proposed organization and sent them to interested parties in the state. The committee consists of J. E. Todd, president of the Columbus Chamber of Commerce; S. P. Bush, president of the Ohio Manufacturers' Association of Columbus; W. C. Culkins, secretary of the Cincinnati Chamber of Commerce; H. S. Grimes, president of the Portsmouth Chamber of Commerce, and U. S. Stevens, secretary of the Akron Chamber of Commerce. Columbus will be the headquarters of the new organization.

The Commercial Lumber Company of Youngstown, O., has been incorporated with a capital stock of \$40,000 to deal in timber and timberlands. The incorporators are M. Lee Gailey, John L. Gailey, William Orr, J. Dale Gailey and A. C. Cook.

The Brott & Ford Company of Willoughby, O., has been incorporated with a capital stock of \$25,000 to deal in lumber and operate a lumber yard. The incorporators are A. H. Ford, Elmer E. Brott, H. C. Boyd, A. H. Coudon and George W. Shaw.

Marion Menefee, 274 South Ohio avenue, who is connected with the lumber firm of Cones & Menefee, 450 West Broad street, died recently as the result of an automobile accident.

R. W. Horton, sales manager for the central division of the W. M. Ritter Lumber Company, says trade is very good in every line of hardwood. The yard people are probably the best buyers at this time. Retailers are trying to stock up preparatory to the spring rush. Factory trade is also good and manufacturing concerns are buying liberally. Implement and vehicle dealers are in the market and there is also a good demand for car stocks. Furniture people are expected to buy after the furniture shows are over.

W. L. Whitacre of the W. L. Whitacre Lumber Company, recently returned from a buying trip in the South.

John R. Gobey of John R. Gobey & Co., says the demand for hard wood is very good and that prices are ruling firm. Stocks are scarce and there is no accumulation of any great variety. Mr. Gobey recently returned from a southern trip where he purchased for his concern.

A delegation of Columbus lumbermen consisting of John R. Gobey, M. A. Hayward, W. B. Sisson, J. W. Mayhew and others attended the annual meeting of the Hardwood Manufacturers' Association of the United States at Cincinnati recently.

Manager Hodil of the Virginia Lumber Company reports a good demand for hardwoods, especially in the lower grades. Prices are holding up firm and shipments are going out well.

J. A. Ford of the Imperial Lumber Company reports a good demand with prices strong. He fears the heavy fall of snow will delay shipments.

F. Everson Powell of the Powell Lumber Company says the volume of business is very good and the factory demand is probably the best. Yards are buying only for immediate uses.

An important change took place in the hardwood field in central Ohio when the firm of M. A. Hayward & Son moved its headquarters from Columbus to Detroit. M. A. Hayward, head of the concern, will have charge of the Detroit office, which is located in the Palmer building. H. M. Hayward will retain the office in this section. The concern is one of the heaviest hardwood shippers in central Ohio.

W. B. Sisson, sales manager for the Sowers-Leach Lumber Company has returned from a trip in the South where he made extensive purchases. He says the trade is good for this time of the year and prospects for the future are bright.

◀ TOLEDO ▶

The Toledo Carriage Woodworking Company reports business better than it has been for three years past. The factory is running at full capacity and full time.

A meeting of the stockholders of the Booth Column Company was held Jan. 27, at which time directors for the ensuing year were selected. The old board of directors was selected with the exception of David Trotter, who resigned, his place being taken by R. A. Lauders. Officers were elected as follows: President, W. S. Booth; vice-president, E. W. Crumback; secretary, J. H. Ellis; treasurer, Wm. T. Hubbard. The stockholders will hold a meeting in the near future to define the policy of the concern for the coming year.

The Gotshall Manufacturing Company reports many inquiries and a big call for bending stock. The material is rather scarce and prices are high and dry hickory stock is extremely hard to get. The concern will begin rebuilding its factory in the early spring as soon as the weather will allow.

Spontaneous combustion was the cause of a recent fire in the planing mill at the Big Four Hardwood Company on Avondale avenue. The fire originated in a coal bin but was put out by firemen before much damage was done.

The Toledo Turning Works, manufacturing porch columns, reports business a little dull, as is natural at this season of the year. The outlook is reported extremely promising and a large spring business is looked for. The factory is now running nine hours a day with two-thirds of its force.

◀ INDIANAPOLIS ▶

Robert Heun of Richmond has gone to Japan to engage in the hardwood lumber trade.

Building permits issued by the building inspection department last month amounted to \$305,385, establishing a new record for the month of January. Permits issued in January, 1912, amounted to \$142,955.

Refrigerators will be manufactured by the Acme Refrigerating Company, organized and incorporated with a capital of \$10,000 at Hammond, by William Wolter, C. D. Lewis and Adolph Bossa.

John Oxenford, for twenty-five years engaged in the wholesale lumber business, died here Jan. 27 after an illness dating from last October. He was born in Yorkshire, England, and was sixty-six years old. Burial was in Crown Hill cemetery.

With an authorized capitalization of \$30,000, the Shelbyville Desk Company has been organized and incorporated at Shelbyville to manufacture a line of desks. Those interested in the company are W. J. Kamire, E. A. Swain and E. F. Kamire.

The Atkins Pioneers, composed of persons who have been employed by E. C. Atkins & Co. for twenty years or more, held their annual meeting and banquet at the Spencer House on the evening of Feb. 1. The oldest member is John H. Wilde, employed by the company forty-eight years. Officers were elected as follows: President, Ernest Velwegh; vice-president, Charles Bronson; secretary, Charles Newport, and treasurer, Charles Aumann.

◀ MEMPHIS ▶

The crest of the rise in the Mississippi river has already reached Memphis and, while the river is stationary at the moment, it is expected that the water will begin to fall within the next day or two. The highest point reached was 40.5 feet. This is within between four and five feet

of the high water mark established here last spring. The water is still rising from Memphis south and indications are that there will be a pretty high stage recorded at Helena, Greenville and other points between here and New Orleans.

So far as Memphis proper is concerned, the high water has done comparatively little damage. A few plants on Wolf river have found it impossible to operate during the past few days but they expect to resume very shortly. In South Memphis there has been very little if any inconvenience occasioned by the high water. The levee surrounding the yard of May Brothers, which gave way last year, has held intact and that company has been able to continue in steady operation. The Memphis Saw Mill Company and other firms, which found it impossible to operate last year for quite a while, have likewise escaped injury. The track leading from the telepher docks to the plants in New South Memphis has not been covered by water as was the case last year, and the movement of timber has not therefore been seriously interfered with. Altogether the lumbermen of Memphis are congratulating themselves upon the fact that the high water has come without bringing any more inconvenience or loss.

Some of the lumber firms of Memphis owning and operating plants outside of this city have not been so fortunate. The plant of the N. Butler Haynes Company, at Beulah, Miss., has been put out of commission for the present, and this firm has also a great deal of timber which is under water. Lee Wilson & Co., operating a plant in that locality, have also found it impossible to run recently. One of the mills at Stoneville, Miss., the output of which is taken by the Greble-Sine Lumber Company, is also unable to operate. These conditions have resulted from the failure of the government engineers to repair the break in the levee system of Beulah, which occurred last spring. This is now about 400 feet wide and a vast area is covered with from four to six feet of water. The Riverside division of the Yazoo & Mississippi Valley Railroad Company has been put out of commission and this has materially interfered with the movement of timber from that territory.

Lumber interests on the Arkansas side of the Mississippi river have suffered little if any inconvenience from the high water. The levees at Modoc, Wyanoke and other points where breaks occurred last year were repaired in plenty of time and there has not been any giving away of the levee system at any point on the western side of that stream. George C. Brown & Co., who were seriously interfered with last year, have been able to operate steadily at Proctor and the plant of Lee Wilson & Co., at Wilson, has escaped even the necessity of suspension. Last year there was scarcely a plant in eastern Arkansas near the river able to operate for quite a while as a result of breaks in the levee system and the consequent flooding of a vast territory in that state.

The movement of timber to Memphis over the western lines has not been interfered with. Owing to the fact that the levees in Arkansas have remained intact, the tracks of all the western lines have remained above water and there has been a constant handling of business both into and out of the West. The only interference with the lines east of the Mississippi river has been in the case of the Riverside division of the Yazoo & Mississippi Valley road, to which reference has already been made.

Although through service is being maintained on the Yazoo & Mississippi Valley main line it may be noted that this road is short of equipment and that the loading of logs for Memphis and other points thereon has not been anything like it might be. In fact the Valley Log Loading Company says that it was impossible for it to do any work for more than a week, as a result of the lack of motive power and as a result of the presence of so many loaded cars on the sidings below this city. The company, however, a few days ago resumed loading and it is expected that there will be pretty full receipts of timber over that line at Memphis.

The heavy rains which have occurred throughout this territory since the first of the year have interfered to a considerable extent with logging work and the outlook for an adequate timber supply is not flattering at the moment. Lizards are being used freely in the low lands but it is impossible to make headway with teams. However, conditions from a logging standpoint are far superior to what they were following the high water of last year and lumbermen here are hopeful that it will be possible to secure a sufficient supply of timber to enable them to take care of their more urgent needs.

The Dugger & Goshorn Company of this city has purchased 3,140 acres of timberland south of Humphrey, Ark. This tract adjoins the other holdings of this firm and brings the total to about 6,500 acres. This company operates a plant at Memphis for the manufacture of hardwood lumber, plow handles and dimension stock. It has been engaged for some time in the erection of a seven-foot band mill at Warren, Ark., and this is about complete and ready for operation. It is estimated that the firm has enough timber to last five or six years.

The Southern Boiler & Tank Works is beginning to erect a plant at the intersection of the Union Railway Company (Belt Line) and Wolf river. This is to be one of the most complete of its kind in the South. This company is owned by C. L. Ford and C. S. Stanton. It was organized several years ago and has been remarkably successful. It will be possible for the company to do several times as much business under the new regime as heretofore.

E. W. Cowgill, who recently resigned his position as assistant to the president of the Illinois Central Railroad Company, has gone to Clarksdale, Miss., to take charge of the United States Lumber & Cotton Com-

pany, which maintains offices at that point. This company has extensive holdings of timberlands in the Mississippi valley and it proposes to establish sawmills and take other steps for the development of the timber thereon. This is to be done with a view to clearing the land and placing it in readiness for cultivation. When all of the land has been cleared and placed in cultivation the company will have approximately 33,000 acres for cotton culture.

Among the recent visitors to Memphis has been L. P. Arthur, formerly of the Arthur Hardwood Flooring Company. He left Memphis some years ago and is interested in the Payson-Smith Lumber Company. The general offices of this firm are at Minneapolis, but Mr. Arthur has his headquarters at Chicago. The present Memphis Hardwood Flooring Company is successor to the Arthur Hardwood Flooring Company, in which Mr. Arthur was one of the moving spirits. He brings cheerful news to Memphis regarding conditions obtaining in the hardwood lumber industry. Mr. Arthur was accompanied to Memphis by T. E. Youngblood, manager of the St. Louis offices of the same firm.

Judge J. E. McCall, of the federal court for the western district of Tennessee, has sustained the plea in abatement entered by Casey Todd, for the Mississippi River Commission, in the suit brought by M. S. Cubbins, representing the Riparian Land Owners' Association, against the commission and sixteen levee boards in the Mississippi valley. This ends the action which was brought by Mr. Cubbins and associates for the purpose of restraining the commission and the various levee boards from maintaining levees on either side of the Mississippi river between Cairo and the Gulf. The decision of Judge McCall is a source of much satisfaction to lumber interests and others who have extensive holdings in the Mississippi valley which are protected by the embankments against which the suits are aimed.

< BRISTOL >

At a meeting of the creditors of the J. A. Wilkinson Lumber Company, Inc., held recently, Trustee Irving Whaley was instructed to offer for sale at public auction, on March 8, the Wilkinson mill and yard site in this city. The property cost about \$70,000.

The president of the company, J. A. Wilkinson, was examined at length. G. E. Goodell, secretary-treasurer, was also on the stand. It was developed that after the failure of Charles R. Partridge & Co. at Jersey City, N. J., in May, 1912, the Wilkinson company made a contract with J. M. Myers of Philadelphia and E. H. Cobie of Jersey City, whereby they were to float an amount of paper of the Wilkinson company, not to exceed \$200,000, the company to advance to the men \$15,000 of its paper and on future sales to receive sixty per cent and Myers and Cobie forty per cent. It was claimed that their net commission was to be but ten per cent and that they were to assume payment of forty per cent of the paper at maturity. However, it was shown that little is known of Myers and that he cannot now be located. Little is known of Cobie except that he was formerly with the Partridge company, the failure of which caused the failure of the Wilkinson company. Cobie wrote attorneys here, who wrote him for information, that he would furnish it if a check for \$125 were sent him. An attorney was sent there and his deposition taken without giving him anything. On the stand J. A. Wilkinson told of the contract with Myers and Cobie and said that the company never received anything on a considerable amount of the paper given to Myers and Cobie, but this paper, together with that upon which the company realized sixty per cent of the proceeds, is now all here for collection, being held by innocent purchasers. The creditors are endeavoring to hold the directors personally liable because the company paid a dividend after the Partridge loss.

William S. Whiting of the Whiting Manufacturing Company was here this week from Asheville, N. C. He says that the company is hopeful of financing its big timber proposition at an early date, so that operations can be resumed. The company owns a boundary of 125,000 acres of virgin forest in Graham county, North Carolina, but must raise \$1,000,000 more to build a railroad from Fontana to Robbinsville and railroads from Robbinsville through the timber, in order to get it out. He believes that the company will resume before long. Frank R. Whiting of Philadelphia is looking after the financing of the proposition.

The Georges Lumber Company of Roanoke, Va., has just been organized for the purpose of developing a large area of timber land in Patrick county, Virginia. A band mill will be installed and a small railroad built.

The Tri-State Lumber Company of Uniontown, Pa., is preparing for extensive development of timberlands in southern West Virginia, near the Virginia border. A railroad will be built and several mills installed at an early date.

< LOUISVILLE >

Friends of Charles H. Stotz are sympathizing with him on account of the poor state of his health. Tuberculosis has developed, and Mr. Stotz is planning to go to Germany to take the much-heralded Friedmann cure. Mr. Stotz recently filed a petition in bankruptcy for the Falls City Lumber Company, the name under which he had been doing business, but declares that if he gets well he will surely get on his feet in the business world again.

The Louisville Hardwood Club attended the annual convention of the

Hardwood Manufacturers' Association of the United States in Cincinnati almost en masse, passing up its own regular weekly meeting in order to attend. This action was largely the result of a cordial telegram of invitation wired to the organization by Lewis Foster, secretary of the association. The Hardwood Club will go to Nashville Feb. 18, to be the guest of the Lumbermen's Club of that city. A special car has been engaged for the trip. This will be the first time the two clubs have ever foregathered, and the trip is expected to be a most enjoyable one. The club will also be officially represented at the annual meeting of the National Wholesale Lumber Dealers' Association, to be held in Atlantic City March 6 and 7, the association having asked that three members be named to be the special guests of the organization at its banquet. President Edward L. Davis will name the three representatives in the near future.

Railroad men representing the roads interested conferred in Louisville recently regarding the advance in rates on lumber from the South into Canada, which is the subject of a complaint now before the Interstate Commerce Commission. The two subjects taken up were the division of rates which should be in effect and the proper defense to make against the arguments of the shippers. There is a bare possibility that as a result of the meeting the advance will be withdrawn.

The 1913 flood is now a matter of history, as far as Louisville is concerned, and "the Point," the district chiefly affected, is now in a normal condition, both as to its residents and the industrial concerns located there. Their yards have been placed on terra firma again; losses, which turned out to be remarkably small, have been charged up, and business is running along about as usual. The Louisville Point Lumber Company's sawmill is now in condition to run, and as it was the first affected by the rise, this indicates the passing of the last vestiges of the flood.

In all probability, according to advices from Washington, the bill of Congressman Stanley, which was intended to force the Louisville & Nashville to grant interchangeable switching to local shippers, will not be acted upon at this session. The delay in getting legislation on the subject will not affect the fight of the Board of Trade in behalf of lumbermen and other shippers who have been imposed upon by the arbitrary rules of this company on the subject of switching. The Board will proceed to lay a complaint before the Interstate Commerce Commission in the near future, believing that the present statutes give the commission ample authority with which to deal with the matter.

The Salt Lick, Ky., Lumber Company, which recently sued the American Boom & Timber Company, the Wheeler-Holden Tie Company and the Whistler & Searcy Company to enjoin these concerns from interfering with the movement of rafts of the plaintiff, settled its differences with the defendants without the necessity of having the case heard. The trouble arose over the use of the Licking River, the Salt Lick company contending that the American Boom & Timber Company and the others had arranged their booms so that it was impossible for it to float its logs out.

J. W. Johnson & Co., Jackson, Ky., have purchased 30,000 acres of timberland on Line Fork of the Kentucky river, and are building a twenty-mile railroad to the extension of the Lexington & Eastern, the purpose of which is to enable them to develop the property. A large mill will be built, as well as other buildings needed in the operation, which will be one of the largest in eastern Kentucky.

The handle factory of H. R. Lemay at White Cloud, near Corydon, Ind., was recently burned with \$4,000 loss. The plant probably will be rebuilt.

The Turner, Day & Woolworth Handle Company of Louisville, one of the largest hickory handle manufacturers in the world, has declared a semi-annual dividend of four per cent, payable Feb. 1.

Carr Brothers of Nashville have purchased a big tract of timber in Bell county from the Continental Coal Corporation of Pineville, Ky., and will erect a large mill near Pineville.

ST. LOUIS

The estimated cost of new buildings and alterations for which permits were issued during January fell \$2,801,163 short of the mark for the corresponding month last year, according to the report of the building commissioner. The total estimated cost in permits issued during January last year was \$3,408,032. The total last month was \$618,869. The permit for the Railway Exchange building for \$2,600,000 was taken out last January.

Both shipments and receipts of lumber showed increases during last month. The receipts in January, 1913, were 16,137 cars, compared with 10,476 cars during the month of January last year, an increase of 5,661 cars. The shipments last month were 10,339 cars, while during the month of January, 1912, they were 7,584, or an increase in January this year of 2,755 cars. There were no shipments or receipts during January last year nor this year.

The hearing in the matter of the investigation and suspension of advances in rates of hardwood lumber from points in Arkansas, Louisiana and other points to Memphis, St. Louis and other points of destination, which was set for Feb. 10, in this city, has been postponed until March 10. It will be before Special Examiner Elder. Harold Small, who will have charge of the legal end for the Lumbermen's Exchange, says that hardwood lumbermen from Omaha, Neb., Cairo, Ill., Memphis, Tenn., and possibly Chicago, will appear before the examiner and oppose any advances.

Frank G. Hanley, wholesaler of cypress lumber, left for New Orleans and Cuba last week. He will spend a few days in New Orleans on business and will return to St. Louis on Feb. 15.

E. W. Blaney, sales manager for the Bethman Cypress Company, who has been making a tour of inspection to the south point and a trip through the North, states that he brought in some good-sized orders and found conditions very good everywhere he visited. The lumbermen are feeling fine, stocks are very low and he anticipates a big trade from that section as soon as the weather opens up.

E. H. Luehrmann of the C. F. Luehrmann Hardwood Lumber Company reports conditions good and that lots of orders are being shipped out all the time. The demand for everything on the list is strong. Gum, yellow pine and oak are most in demand and orders have come in so well recently that the company's stocks are running low, as it is not getting in enough dry stock to meet the demand.

L. M. Burgess of the Steele & Hibbard Lumber Company is tralling around up in Iowa and Minnesota, getting orders. He has already sent in some good-sized ones.

Leopold Methudy, a wealthy retired lumberman, seventy-six years old, died last week. For more than two years he has been in poor health. He was a captain in the Union Army, stationed at Fort Pickering, Memphis, Tenn. He moved to St. Louis shortly before the war and engaged in the lumber business. He was a member of Ransom Post of the G. A. R. of St. Louis and a member of the Loyal Legion. He is survived by his wife, three sons, two daughters and two grandchildren.

The Lumbermen's Exchange held its first monthly dinner and meeting under the present administration on Feb. 7, at the Mercantile Club. The standing committees made reports on what they have done and what they intend to do. President F. H. Smith advocates holding monthly meetings in order to bring the members in closer touch with each other and to make them take greater interest in the affairs of the Exchange. Only the members of the exchange are expected to participate in these monthly meetings.

MILWAUKEE

The Steinman Lumber Company of this city has filed an amendment to its articles of incorporation at Madison increasing the capital stock from \$100,000 to \$200,000.

Louis Hanitch, C. J. Hartley and L. J. Hunt are named as the incorporators of the Belden Timber Company of Superior. The concern has been incorporated with a capital stock of \$25,000.

The Interstate Commerce Commission has authorized railroad rates on lumber as follows: The Milwaukee road is authorized to continue to charge on lumber in carloads between Eau Claire, Chippewa Falls or Menominee, Wis.; Duluth, Cloquet, Minn.; Superior, Wis., and points taking the same rates as are concurrently in effect on like traffic between the same points by way of short line and to maintain higher rates from and to intermediate points, provided their present rates from and to said intermediate points are not exceeded.

Due to the better demand and prices that prevailed for timber last year, the logging operations in northern Wisconsin and Michigan are heavier than for the past five years. Weather for logging is very good for the large operator, but the small jobbers are looking for a fall of snow. Millions of feet of timber have been cut but are in many cases lying on skids in the woods awaiting the coming of snow so that they may be hauled to market or sidings. The lack of snow means less logs on the market and an advanced price of lumber. The large operators, with their modern hauling devices, are hauling much timber.

The Kenfield-Lamoreaux Company of Washburn has started both day and night shifts and expects to continue the same throughout the winter. The mill furnished stock for the large box and crating factory of the company in Washburn, which is also running full blast.

The Diamond Lumber Company of Green Bay cut over 24,000,000 feet of lumber during 1912, according to the report of General Manager J. T. Phillips at the annual meeting of the company. With favorable labor conditions next year the cut for 1913 will reach 30,000,000 feet. The company's mill is running day and night shifts now. John Tolfree of West Branch, Mich., was elected president; M. P. Gale of Saginaw, vice-president; A. W. Seeley of Saginaw, secretary; J. T. Phillips, Green Bay, treasurer and general manager.

W. T. Bradford, bond officer of the Union Trust Company of Menominee, has returned from Manistique where the reorganization of the Consolidated Lumber Company was completed. The Consolidated company has taken over the properties of the Chicago Lumber Company of Michigan, the Western Lumber Company and J. D. Wilson & Co. of Manistique. The company is capitalized for \$1,475,000 and has a serial bond issue of \$350,000. I. C. Harmon, manufacturer of Menominee, was elected president of the company and will move to Manistique to assume duties.

The Merrill Veneer Company determined to make a general expansion of the capacity of its plant at the annual meeting at which officers were also elected.

Ralph Story of Milwaukee, has acquired an active interest in the Badger Basket & Veneer Company at Burlington, and has assumed the position of secretary and treasurer.

George Hays, a well-known box manufacturer and an old resident of Milwaukee, died on Jan. 27 at the home of his daughter after a short

Illness. He engaged in the planing mill and box manufacturing business on Fifth and Cedar streets many years ago. Some time ago Mr. Hays retired and his sons took over the management. Mr. Hays was eighty years old, and is said to have been the oldest living Mason in Milwaukee. Two sons and three daughters survive him.

◀ DETROIT ▶

Secretary John Lodge of the Dwight Lumber Company reports that his factory is very busy and that the demand for hardwood flooring is constantly increasing. During the past thirty days prices on flooring have increased an average of \$2 a thousand, due to the increase in price of rough material. At the present time Mr. Lodge says that the lumber supply is ample but that he fears that the company will have some difficulty in getting rough stock before very long.

George I. McClure says that business is rushing and that the hardwood sales of the past month are far in excess of any January in the business to the best of his recollection. Owing to the scarcity of snow in Michigan he is afraid that the supply of Michigan hardwood will be very scarce. While all the lumbermen are well equipped to make an enormous cut, the non-appearance of snow is keeping them guessing.

The Thomas Forman Company reports having had the best January business in many years. Business still continues to be brisk with prices very satisfactory. A representative of the company says that the large amount of building being done in Detroit has kept it busy every minute and that prospects for the remainder of the winter are very encouraging. Hardwood flooring and finish are in big demand and the supply is a trifle short.

One of the new lumber and finish companies in the Detroit field has filed articles of incorporation as the F. L. Lowrie Lumber & Finish Company. Of a capital stock issue of \$50,000, at \$100 per share, \$25,000 was paid in. Frederick T. Lowrie owns 298 shares and George P. Lowrie and Charlotte P. Lowrie one share a piece. The stock runs for a term of thirty years.

The Hardwood Market

◀ CHICAGO ▶

The situation locally is practically unchanged during the last two weeks. Continued shortage of most lines of stock—and as heretofore the lower grades particularly—together with steadily maintained and in some instances gradually increasing prices, mark the local conditions. Both northern and southern manufacturers with headquarters or representatives in Chicago, and also the larger wholesalers handling northern and southern hardwood stocks, report that they see no chance of material relief in the stock situation for a good many months. The shortage in hardwood stocks has undoubtedly had its effect upon the consumption of veneer as this department of forest products is now enjoying one of the most profitable periods it has ever experienced.

It would be easier to enumerate the woods which are in less active request than those which are in great demand, as practically all grades of all species are selling well. As is everywhere noted, plain red oak is the leading item among hardwoods. Plain white oak continues to be a close second, while the gradually increasing call for quartered oak stock continues to be apparent. Red gum has resumed its former strong position and sap gum is showing rapidly growing strength and an increasing price which will undoubtedly bring it to a more equitable level as compared with the cost of red gum. Increasing difficulty is encountered in securing box lumber and it is not probable that this situation will be relieved to any extent during the present year.

The soft open winter in the North and the excessive rains in the Mississippi producing territory have militated seriously against logging. Some difficulty in securing adequate stock is anticipated by local wholesalers on this account. But it is the unanimous opinion of the local trade that the whole thing hinges upon buying and deliveries, as lumber will sell and sell at a good figure.

◀ NEW YORK ▶

There is nothing of special interest in the local hardwood market. The strong features of the past several months continue in evidence and there is nothing to indicate any relaxation in the market. Some advances have been noted since the last report, particularly in ash and oak. Maple has also advanced. There is no need to worry about the demand for good lumber, and the improvement in call for lumber of lower grade is encouraging. Any change in the general lumber market for the next six months or more will be toward advanced prices.

◀ BUFFALO ▶

The hardwood trade is doing well at present and the past month was above the average in extent of business. Dealers state that the mild weather has made it difficult for many mills to get their log supplies and this has had a strengthening effect upon prices, which already were firm. There is a good deal of difficulty in getting dry stock of various woods and the outlook is for firm prices in the near future.

Quartered oak is beginning to show a little more strength and even the common grades, which have been in small demand for some time, are now firmer. Plain oak sales are being made in good quantity at the usual firm quotations. Maple and birch are strong and flooring in these woods is bringing higher prices. Ash is a little more active. The low grades of all hardwoods are in small supply and poplar and basswood show much strength, being considerably higher than last year.

◀ PHILADELPHIA ▶

The hardwood situation remains unchanged from a fortnight ago. Balance sheets are all taken off and other fiscal matters disposed of, and where to secure the necessary stock is now the paramount consideration. Both the wholesaler and consumer realize that in this matter they are up against a hard problem, and the depleted stock pile at the mill end and the inclement weather conditions in the Southland give little hope of a near solution. For many years the manufacturers have not entertained so many visitors, all pleading for some of their stock, and at their own price.

The consuming industries continue active, and a stout optimism obtains everywhere as to outlook. Plain oak continues leader among the woods; quartered oak is still climbing; ash gains; gum in the eastern market is in good demand; beech, birch and maple hold a good place; poplar remains steady and chestnut makes new friends. There is no weakening in cypress and the mahogany market is strong.

Bluestone Land & Lumber Company

MANUFACTURERS

WEST VIRGINIA HARDWOODS

Soft White Pine, Oak, Poplar, Chestnut, Hemlock

COMPLETE PLANING
MILL FACILITIES

Band Sawed Stock

RIDGWAY
PENNSYLVANIA

CINCINNATI

Hardwood Manufacturers and Jobbers

RIEMEIER LUMBER CO.

OAK, POPLAR, CHESTNUT
SUMMERS AND GEST STREETS

JAMES KENNEDY & CO., Ltd.

OAK, POPLAR AND OTHER HARDWOODS
FIRST NATIONAL BANK BUILDING

The Kosse, Shoe & Schleyer Co.

WALNUT, OAK, AND OTHER HARDWOODS
103-4-5 CAREW BUILDING

OHIO VENEER COMPANY

Manufacturers & Importers FOREIGN VENEERS
2624-34 COLERAIN AVENUE

CHARLES F. SHIELDS & CO.

SPECIALISTS IN WIDE STOCK
POPLAR, OAK, CHERRY, BIRCH

GEORGE LITTLEFORD

RED CEDAR, CHERRY
OFFICE: 1263 RICHMOND STREET

SWANN-DAY LUMBER CO.

Mrs. YELLOW POPLAR and WHITE OAK
SALES OFFICE—SECOND NATIONAL BANK BUILDING

SHAWNEE LUMBER CO.

HARDWOODS, WHITE PINE and HEMLOCK
Sales Office—South Side Station—C. H. & D. R. R.

CONASAUGA LUMBER CO.
MANUFACTURERS HARDWOOD AND PINE
 FOURTH NATIONAL BANK BUILDING

HARDWOOD LUMBER CLEAN-UP

Being about to put into commission my hardwood sawmill at Memphis, want to clean up the present stock of well-manufactured, good average length and width, and thoroughly dry hardwoods in Memphis yard, before piling any new stock.

The following is a list of the principal items contained in this assortment:

ASH

1" 1s & 2s.....	15,000 feet
1½" C & Btr.....	75,000 feet
2" C & Btr.....	30,000 feet
3" C & Btr.....	30,000 feet
4" C & Btr.....	25,000 feet

QTD. RED GUM

1¼" C & Btr.....	30,000 feet
1½" No. 1 Com.....	20,000 feet
2" No. 1 Com.....	10,000 feet

POPLAR

1¼" 1s & 2s.....	20,000 feet
1½" 1s & 2s.....	50,000 feet
2" 1s & 2s.....	10,000 feet
2" Signboards	25,000 feet

QTD. WHITE OAK

1¼" 1s & 2s.....	25,000 feet
¾" No. 1 Com.....	25,000 feet
1" No. 1 Com.....	50,000 feet
1¼" No. 1 Com.....	20,000 feet
1x2½ to 4" 1s & 2s Strips....	50,000 feet
1x2 to 4" No. 1 Com. Strips....	150,000 feet

QTD. RED OAK

1" 1s & 2s.....	20,000 feet
1¼" 1s & 2s.....	25,000 feet
1½" 1s & 2s.....	8,000 feet
¾" C & Btr.....	19,000 feet
1" to 2" No. 2 Com.....	35,000 feet
1x2 to 3" No. 1 Com. Strips....	54,000 feet

PLAIN RED OAK

¾" 1s & 2s 12" & up wide....	22,000 feet
¾" No. 1 Com.....	18,000 feet

PLAIN WHITE OAK

¾" 1s & 2s.....	100,000 feet
½" 1s & 2s.....	47,000 feet
½" 1s & 2s.....	27,000 feet

WORMY QTD. WHITE OAK

1" C & Btr.....	60,000 feet
-----------------	-------------

Address Chicago office for quotations.

Ask for price on any item listed herein or on mahogany lumber, or fancy wood veneers of any description.

C. L. WILLEY, Chicago

Largest Mahogany Veneer and Lumber Producing Plant in the World

grades are very strong. Quartered oak is moving well and commanding a better price than formerly. Ash is a ready seller, thick stock being very strong. Poplar, basswood, gum and cottonwood are high in price and very scarce.

The market is very active on low-grade cypress at stiff prices. Shop and better is in good demand but will be much improved by the opening of the building season. Planing mills are very good users of the latter grades at this time. Dressed or yard stock is a little off at the present time.

There is a growing demand for the better grades of poplar, and while prices remain as during the past several months, the opinion is general that better prices will prevail should the demand continue. Low-grade stock is in strong demand and is very scarce. Prices are the highest in years.

All planing mills are still very busy getting out stock for immediate use. This is principally in the finishing lines, but quite a little of it is for work on buildings recently started. The popular trend is still toward red gum for interior finish where a moderately priced hardwood is desired. Builders have found that gum has stood the test, the results obtained being very satisfactory. Architects do not hesitate to specify gum and a steady increase in its use is assured. There is, of course, much oak used, both fumed and early English finish, also mahogany in the more expensive homes and buildings. Birch is another wood that is popular and is used largely as a substitute for mahogany.

TOLEDO

There is but little change in the local hardwood situation. Prices are holding firm with an upward tendency. There is a decided scarcity in certain lines, especially in low grades, which are in great demand. Plain oak is strong at present and there is also a good market for hickory, dry stocks being scarce. The conditions in the South are still unfavorable, owing to the heavy floods of last season and the open winter which has made it difficult to get out the timber. Inquiries are numerous and orders are coming in well for bending material, while sash and door concerns have been ordering liberally. Hardwood flooring is in good demand, especially from the local field. Boxing and crating materials are scarce and high and much wanted. The outlook generally is considered good. Speculative buying is not being indulged in, but some moderately heavy orders are being placed to take care of the spring business, which it is believed will be even larger than last season, which was a record year in Toledo.

INDIANAPOLIS

Hardwood interests are well pleased with the volume of business they had in January and with the prospects for the immediate future. The January business was better than that of the corresponding period last year and prices are steady. It is predicted that some grades of hardwood will advance shortly.

The veneer mills are having an excellent business and predict that they will have a much larger demand for veneers this year than last. Furniture factories are looking forward to a record-breaking trade. The automobile business is slow at present, but doubtless will show improvement in the spring.

Building operations are breaking previous records and much building is in sight that will require considerable hardwood for interior trim.

MEMPHIS

The demand for hardwood lumber here continues good. Some members say there is perhaps not quite as much activity as there was a short time ago, while others say they are having all the business they can handle. The tone of the market is quite good. In fact there is a tendency toward a slightly higher level in some directions. The smallness of dry stocks has been a feature for some time. At present production is on a pretty good scale but the outlook for a large timber supply is not particularly bright, especially in the late spring, with the result that there is a disposition in some quarters to anticipate a further reduction in shipping dry holdings in the South. The demand is particularly good for the lower grades of cottonwood and gum, which are somewhat scarce and which are firmly held. Box factories are working on full time and the other industries consuming these grades are also taking their full quota. There is also a very satisfactory call for all grades of plain oak both red and white, with the preference for thin. Quartered oak is about steady at the recent level and the same is true of ash and cypress. It is expected that the adjustment of the differences between the steamship companies and the railroads west of the Mississippi river will stimulate export business because facilitating the handling of export shipments. After March 3, these exports will be handled on through bills of lading instead of on local bills as heretofore.

BRISTOL

Trade conditions here are favorable. Business is brisk and is improving steadily. The prospects are considered the most favorable for a long while. A large volume of business is being done and much more would be done but for the scarcity of stocks. Most of the mills are run-

ning and owing to the unusually mild winter thus far, have been able to accomplish much more than usual. The output from this section will be considerably larger in a few weeks when the many small country mills that are now idle are again put into operation.

◀ LOUISVILLE ▶

With lumber in fair supply and the demand well above the average, hardwood men in this market feel that 1913 is doing all that could have been expected of it. It was felt all along that the first six months of the new year would bring good business, so that the present eminently satisfactory conditions were in a measure expected. Nevertheless, the realization of a prospective outline of future developments is a pleasing thing, and is thoroughly appreciated by those in a position to take advantage of the business that is offering itself. Some items of stock are rather scarce, and of course lumbermen who have stock on hand are able to dispose of it at a fairly stiff premium. Hardly anything, in fact, is found to be oversupplied, as indicated by the fact that some of the largest manufacturers are themselves in the market for lumber with which to take care of their requirements, having found the run on certain items greater than they had anticipated. Consumers in all lines are taking an optimistic view of the situation, and are operating actively. With the railroads buying, and furniture, piano, implement, vehicle and other large wood consuming interests making hay while the sun of prosperity shines, there is certain to be plenty doing for the hardwood man.

Prices are stiffening generally, and the advances which have been made are likely to prove permanent. Of course, if business in general is seriously affected by tariff revision, poor crops, or any other untoward factors, lumber will also suffer; but as there is no need of crossing bridges until they are reached, hardwood men are taking an aggressively cheerful view of things and are not trying to discount future improbabilities.

◀ ST. LOUIS ▶

The hardwood situation is improving and some activity is reported among the St. Louis hardwood yards, although weather conditions during the past few days have not been such as to permit of much loading. Snow and cold weather is proving a handicap to shipments being made. Inquiries are increasing right along. The dealers are feeling quite optimistic over future conditions. They believe prices will make further advances, more particularly on items and grades most in demand. Mill supplies are very low, and although operations have kept up nearly to the first of the year, the output will not catch up with the demand. Buyers who have been covering the South looking for dry lumber report a great scarcity of dry stock. The demand at present is mostly for plain oak and ash. There is also a satisfactory call for gum, cottonwood and cypress. Poplar also is being called for quite freely. The demand for lower grades on all items is increasing and will no doubt continue under the present milling conditions. Cypress is also showing quite a little improvement and good orders are being sent in by traveling men as well as coming in by mail, the latter mostly for quick shipment. Inquiries are also showing an encouraging increase.

◀ MILWAUKEE ▶

The activity on the part of local manufacturing concerns seems to be the leading factor in bringing about the steady improvement which is taking place in the hardwood trade. Practically all the concerns have finished their annual inventories and repair work and again have their plants in operation. Consequently, they are in the market for stock. The genuine shortage of most lines of hardwood, coupled with this increased demand, has caused advances in some lines of upper grade stuff. Higher prices in most lines are expected before the close of the season. Stocks in the hands of jobbers are light, and, as their orders must be placed early in the year, there is no question but that the factories will have all they can do from now on.

The outlook at this time in the building field is indeed bright. There has never been a time in the recent history of the Milwaukee building inspector's office when there has been so much building carried on during the winter months, probably due to the favorable weather which has been received. Contractors and architects say that inquiries which are being made would indicate a busy spring in the building field.

Upper grade birch is practically exhausted, while the supply of No. 2 and No. 3 is exceptionally light. Both plain and quarter-sawed oak is scarce and light shipments are arriving from the South. Basswood in all grades is moving fairly well. Increased activity at all the farm implement plants here and about the state has resulted in a brisk demand for hickory and ash. Poplar is wanted, but the supply is light.

◀ DETROIT ▶

The Detroit hardwood market has shown increased strength in the past thirty days. Prices have been steadily increasing on all grades of hardwoods and dealers report a steady demand. Owing to the mild winter building operations have been carried on steadily and this has kept the hardwood dealers busy. The flooring trade is exceptionally busy and there has been a good advance in the price of flooring due to the increase in the price of rough stock. The veneer and box trades have also been very busy.

Mutual Fire Insurance

Best Indemnity at Lowest Net Cost
Can Be Obtained From

The Lumber Mutual Fire Insurance Company, Boston, Mass.
The Lumbermen's Mutual Insurance Company, Mansfield, Ohio.
The Pennsylvania Lumbermen's Mutual Fire Insurance Company, Philadelphia, Pa.
The Indiana Lumbermen's Mutual Insurance Company, Indianapolis, Ind.
The Central Manufacturers' Mutual Insurance Company, Van Wert, Ohio

WANTED

All Kinds of High-Grade

HARDWOODS

S. E. SLAYMAKER & CO.

Representing
WEST VIRGINIA SPRUCE LUMBER CO., Fifth Avenue Building,
Cass, West Virginia. NEW YORK

TIMBER TALKS

Looking Backward, 1918

I COULD have bought that tract of timber in 1913. It was offered at a low price on an estimate showing the quantity of lumber it would have produced had it been cut at that time. It is worth double that price or more today and through closer utilization it will produce one-third more in values than it would have under methods then in vogue. That would have been at least

166 per cent. in five years

Five years from now what will your conclusion be?

"I am glad I bought it,"

Or

"I wish I had bought it?"

If you live in the present, if you are interested in present opportunities rather than in reviewing those of the last decade, your conclusions will be "I am glad I bought it."

If you are a member of the Ancient and Slothful Order of Hindsighters you will tell future generations what might have happened, if—

James D. Lacey & Company
Timber Land Factors

Chicago, 1750 McCormick Building
Portland, 1104 Spalding Building
Seattle, 1009 White Building

THIS IS OUR RECORD

In Business	- - - - -	7 $\frac{3}{4}$ Years
Losses Paid	- - - - -	\$1,100,000
Savings Effected for Subscribers	- - -	700,000
Quick Assets Belonging to Subscribers	-	775,000

More Cash Assets to each \$100 of Outstanding Liability than the Largest Stock Companies

Entire Interest Earnings Paid to Subscribers

Experience has demonstrated that from one-third to one-half of the cost of their insurance can be saved to the LUMBERMEN by carrying ALLIANCE POLICIES. Give us the opportunity to make these substantial savings for YOU.

Lumbermen's Underwriting Alliance

U. S. EPPERSON & COMPANY, ATTY. & MGR.

R. A. Long Bldg.

Kansas City, Mo.

Advertisers' Directory

NORTHERN HARDWOODS.

American Lumber & Mfg. Co....	12
Beecher & Barr.....	13
Buffalo Hardwood Lumber Co.....	16
Coale, Thos. E., Lumber Company..	12
Cobbs & Mitchell, Inc.....	3
Craig, W. P., Lumber Co.....	12
Curl, Daniel B.....	53
Darling, Chas. & Co.....	53
East Jordan Lumber Company....	64
Elias, G., & Bro.....	66
Estabrook-Skeele Lumber Co.....	4
Flanner-Steger Land & Lumber Co.	4
Forman, Thos., Company.....	60
Goodyear, C. A., Lumber Co.....	54
Hanson-Turner Company.....	62
Heyser, W. E., Lumber Co.....	11
Holyoke, Chas.....	13
Holloway Hardwood Lumber Co....	2
Jones Hardwood Company.....	13
Kent, J. S., Company.....	12
Klann, E. H.....	53
Kneeland-Bigelow Company, The...	3
Litchfield, William E.....	13
McIlvain, J. Gibson, & Co.....	2
McLean, Hugh, Lumber Co.....	66
McFarland Hardwood Lumber Co....	53
Miller, Anthony.....	66
Mitchell Bros. Company.....	3
Mowbray & Robinson Company.....	11
Oelhafen Lumber Company.....	59
Osgood & Richardson.....	53
Palmer & Parker Co.....	12
Sawyer-Goodman Company.....	59
Smith, Fred D.....	53
Standard Hardwood Lumber Co....	66
Stearns Salt & Lumber Company....	9
Stephenson, L., Company, The.....	60
Stewart, I. N., & Bro.....	66
Stimson, J. V., & Co.....	64
Struthers Cooperage Company.....	60
Sullivan, T. & Co.....	66
Taylor, W. R., Lumber Company....	12
Tegge Lumber Co.....	59
Vinke, J. & J.....	60
VonPlaten Lumber Co.....	60
Webster, George, Lumber Company..	13
White, Wm. H., Co.....	68
Wiggin, H. D.....	12
Williams, Ichabod T., & Sons.....	14
Willson Bros. Lumber Company.....	12
Wistar, Underhill & Nixon.....	12
Wood-Mosaic Company.....	13
Yeager, Orson E.....	66
Young, W. D., & Co.....	3

POPLAR.

Anderson-Tully Company.....	9
Atlantic Lumber Company.....	47
Farrin, M. B., Lumber Company.....	14
Faust Bros. Lumber Company.....	14
Keys-Walker Lumber Company.....	6
Logan, J. M., Lumber Co.....	6
Maphet & Shea Lumber Company...	6
Radina, L. W., & Co.....	11

Swann-Day Lumber Company....	46
Vansant, Kitchen & Co.....	68
West Virginia Timber Company....	7
Whiting, Wm. S.....	65
Wood, R. E., Lumber Company.....	13
Yellow Poplar Lumber Company....	68

SOUTHERN HARDWOODS.

American Lumber & Mfg. Co.....	12
Anderson-Tully Company.....	9
Atlantic Lumber Company.....	47
Baker-Matthews Mfg. Co.....	65
Bennett & Witte.....	11
Bluestone Land & Lumber Co.....	46
Boice Lumber Company.....	64
Booker-Cecil Company.....	5
Bradley, E. C., Lumber Company....	47
Brown, W. P., & Sons Lumber Co....	5
Buffalo Hardwood Lumber Co.....	66
Carrier Lumber & Mfg. Co.....	14
Cherokee Lumber Co.....	7
Coale, Thos. E., Lumber Company....	12
Conasauga Lumber Company.....	47
Crane, C., & Co.....	47
Curl, Daniel B.....	12
Darling, Chas., & Co.....	53
Davis, Edward L., Lumber Company	5
Dempsey, W. W.....	65
Duhlmeier Brothers.....	11
Elias, G., & Bro.....	66
Estabrook-Skeele Lumber Co.....	4
Farrin, M. B., Lumber Company.....	47
Faust Bros. Lumber Co.....	14
Flanner-Steger Land & Lumber Co.	4
Garetson-Greason Lumber Co.....	65
Heyser, W. E., Lumber Company....	11
Hill Brothers Tie & Lumber Co.....	61
Himmelberger-Harrison Lumber Co.	64
Holloway Hardwood Lumber Co....	2
Huddleston-Marsh Lumber Co.....	4
Jones Hardwood Company.....	13
Johns-Mowbray-Nelson Company..	47
Kennedy, James, & Co.....	46
Kent, J. S., Company.....	12
Keys-Walker Lumber Co.....	6
Kimball & Kopcke.....	6
Klann, E. H.....	53
Kosse, Shoe & Schleyer Company...	46
Lamb-Fish Lumber Co.....	8
Litchfield, William E.....	13
Littleford, George.....	46
Little River Lumber Company.....	68
Logan, J. M., Lumber Co.....	6
Louisiana Long Leaf Lumber Co....	64
Louisville Point Lumber Company..	5
Maley, Thompson & Moffett Co.....	11
Maphet & Shea Lumber Company...	6
McIlvain, J. Gibson, & Co.....	2
McLean, Hugh, Lumber Co.....	66
McFarland Hardwood Lumber Co....	53
Miller, Anthony.....	66
Mowbray & Robinson Company.....	11
Norman Lumber Company.....	5
Ohio River Saw Mill Company.....	5
Osgood & Richardson.....	53

Paepeke-Leicht Lumber Company...	11
Radina, L. W., & Co.....	11
Ransom, J. B., & Co.....	7
Reinher Lumber Company.....	13
Richey, Harold A., Lumber Co....	47
Russe & Burgess, Inc.....	14

Salt Lick Lumber Company.....	65
Shawnee Lumber Company.....	46
Shiels, Chas. F., & Co.....	46
Slaymaker, S. E., & Co.....	49
Smith, Fred D.....	53
Standard Hardwood Lumber Co....	66
Stewart, I. N., & Bro.....	66
Stimson, J. V., & Co.....	64
Sullivan, T. & Co.....	66
Swann-Day Lumber Company.....	46

Tennessee Hardwood Lumber Co....	7
Three States Lumber Company.....	46

Vestal Lumber & Manufacturing Co.	6
Vinke, J. & J.....	60
Von Platen Lumber Co.....	60

Webster, George, Lumber Company..	13
West Virginia Timber Company....	7
Whiting, Wm. S.....	65
Whitmer, Wm., & Sons.....	12
Wiggin, H. D.....	12
Williams, Ichabod T., & Sons.....	14
Willson Bros. Lumber Company.....	12
Wistar, Underhill & Nixon.....	12
Wood-Mosaic Company.....	13
Wood, R. E., Lumber Company.....	13

Yeager, Orson E.....	66
----------------------	----

VENEERS AND PANELS.

Adams & Raymond Veneer Co.....	61
Ahnapee Veneer & Seating Co.....	62
Astoria Veneer Mills & Dock Co....	63
Central Veneer Company.....	61
Hanson-Turner Company.....	62
Hoffman Bros. Company.....	61
Huddleston-Marsh Lumber Co.....	4
Jarrell, B. C., & Co.....	61
Kentucky Veneer Works.....	61
Kiel Wooden Ware Company.....	62
Knoxville Veneer Company.....	6
Louisville Veneer Mills.....	5
Maley, Thompson & Moffett Co.....	11
Mengel, C. C., & Bro. Company.....	5
Ohio Veneer Company.....	46
Penrod Walnut & Veneer Co.....	61
Putnam Veneer and Lumber Co....	63
Rayner, J.....	4
Rice Veneer & Lumber Company.....	61
Southern Veneer Manufacturing Company.....	63
Underwood Veneer Company.....	63
Veneer Manufacturers' Company....	4
Walker Veneer & Panel Co.....	53
Willey, C. L.....	48
Williams, Ichabod T., & Sons.....	14
Wisconsin Seating Company.....	62
Wood-Mosaic Company.....	13

MAHOGANY, WALNUT, ETC.

Astoria Veneer Mills & Dock Co....	63
Duhlmeier Brothers.....	11
Huddleston-Marsh Lumber Co.....	4
Littleford, George.....	46
Maley, Thompson & Moffett Co.....	11
Mengel, C. C., & Bro. Company.....	5
Palmer & Parker Co.....	12

Penrod Walnut & Veneer Co.....	61
Parcel, Frank.....	65
Rayner, J.....	4
Struthers Cooperage Company.....	60
Willey, C. L.....	48
Williams, Ichabod T., & Sons.....	14

HARDWOOD FLOORING.

Beecher & Barr.....	1
Carrier Lumber & Mfg. Co.....	14
Cobbs & Mitchell, Inc.....	3
Eastman, S. L., Flooring Co.....	60
Farrin, M. B., Lumber Company....	47
Forman, Thos., Company.....	60
Kerry & Hanson Flooring Co.....	60
Louisiana Long Leaf Lumber Co....	64
Mitchell Bros. Company.....	3
Robbins Lumber Co.....	60
Salt Lick Lumber Company.....	65
Stearns Salt & Lumber Company....	9
Stephenson, L., Company, The.....	60
Webster Lumber Co., George.....	13
White, Wm. H., Co.....	68
Wilce, T., Company, The.....	4
Young, W. D., & Co.....	3

WOODWORKING MACHINERY.

Cadillac Machine Co.....	57
Linderman Machine Co., The.....	67
Merston, W. B., & Co.....	12
Phoenix Manufacturing Co.....	14
Saranac Machine Company.....	57
Steinmetz, C. M.....	13
Westinghouse Electric & Mfg. Co..	58

LOGGING MACHINERY.

Baldwin Locomotive Wks.....	57
Clyde Iron Works.....	58
Lidgerwood Mfg. Co.....	56
Russel Wheel & Foundry Co.....	56

DRY KILNS AND BLOWERS.

Grand Rapids Veneer Works.....	57
Phila. Textile Mch. Co.....	12

SAWS, KNIVES AND SUPPLIES.

Atkins, E. C., & Co.....	55
Simonds Mfg. Co.....	54

LUMBER INSURANCE.

Central Manufacturers' Mut. Ins. Co.	49
Epperson, U. S.....	50
Indiana Lumbermen's Mut. Ins. Co.	49
Lumber Mutual Fire Insurance Co..	49
Lumbermen's Mutual Ins. Co.....	49
Lumbermen's Underwriting Alliance	50
Lumber Underwriters.....	14
Pennsylvania Lumbermen's Mutual Fire Ins. Co.....	49
Rankin, Harry & Co.....	13

TIMBER LANDS.

Lacey, James D., & Co.....	49
Spry, John C.....	13

MISCELLANEOUS.

Astoria Veneer Mills & Dock Co....	63
Childs, S. D., & Co.....	53
Gerlach, The Peter, Company.....	53
Lumbermen's Credit Association....	64
Mechanical Rubber Company.....	2
Tamms Silica Company.....	53
Wausau Advancement Association..	5
Westinghouse Electric & Mfg. Co..	58

CLASSIFIED ADVERTISEMENTS

Advertisements will be inserted in this section at the following rates:

For one insertion.....20c a line
For two insertions.....35c a line
For three insertions.....50c a line
For four insertions.....60c a line

Eight words of ordinary length make one line.
Heading counts as two lines.
No display except the headings can be admitted.

Remittances to accompany the order. No extra charges for copies of paper containing the advertisement.

EMPLOYES WANTED

EXPERIENCED SUPERINTENDENT

Wanted for Hardwood Flooring and Veneer factory. Address "Flooring," care HARDWOOD RECORD.

EMPLOYMENT WANTED

A-1 HARDWOOD BAND SAWYER

experienced in quartering oak and mahogany. Strictly temperate and energetic. If you want a good sawyer, address

"BOX 25," care HARDWOOD RECORD.

WANTED—EMPLOYMENT

When you want a salesman for New York state territory, write us. We can supply you with a good man. EMPIRE STATE ASSOCIATION of Wholesale Lumber & Sash & Door Salesmen. Chas. Johnson, Sec'y, 96 Kirkland Rd., Rochester, N. Y.

TIMBER ESTIMATING

TIMBER ESTIMATES

Estimating Southern timber a specialty. Maps, detailed reports as to stand, quality and logging conditions. Have a few high-class properties for sale. Can furnish best references.

THOS. J. McDONALD,
East Tenn. Natl. Bank Bldg.,
Knoxville, Tenn.

WAGON STOCK WANTED

I AM IN THE MARKET FOR

75 to 100 cars of oak poles, bolsters, sand boards, eveners, and reaches; and hickory and maple axles. Will inspect at shipping point, and pay cash. E. B. BROWN, 372 Bayne St.,

Buffalo, N. Y.

LOGS WANTED

WANTED—BLACK WALNUT LOGS

500 cars good black walnut logs, 10" and up in diameter, 6 ft. and up long. Will inspect at shipping point and pay cash.

GEO. W. HARTZELL, Dayton, Ohio.

WANTED—HARDWOOD LOGS

200,000 ft. 28" and up White Oak logs.
200,000 ft. 12" and up Walnut logs.
50,000 ft. 12" and up Cherry logs.
C. L. WILLEY, 2558 S. Robey St., Chicago.

TIMBER LANDS FOR SALE

TIMBER SALE!

20 acres; extra good. Bids opened March 26. Union National Bank, Muncie, Indiana. Address WILLIAM W. SPANGLER, Auburn Jet., Ind.

FOR SALE—40,000 ACRES

Original growth hardwood Virginia forest; Oak, Poplar, Chestnut, Walnut, Hickory, Basswood and Hemlock.

M. T. BANTA & CO., Staunton, Va.

FOR SALE

19,000 acres Hardwood timber, 105,000,000 ft. \$9.75 per acre; 10,000 acres Hardwood timber, 104,000,000 ft., \$15 per acre; 24,000 acres Yellow Pine timber, mill and plant in operation, with 90,000,000 ft. long leaf heart pine, \$413,000.00. All the above in Louisiana and first-class propositions; no trades, and don't write unless you mean business. KENDALL & WILSON, Palestine, Tex.

FOR SALE—1375 ACRES OF TIMBER

Close to the "Forks" of the Ontonagon River, in Ontonagon Co., Mich. This is mostly a cedar proposition and could nicely be lumbered and floated down the river. Balance of timber pine, birch, basswood, elm, ash, spruce and hemlock. Also have 400 acres of hardwood virgin timber located in Iron Co., Mich. Address A. P. HUELLMANTEL, Traverse City, Mich.

FOR SALE

700 acres of well timbered land, consisting chiefly of Southern poplar, hickory and other hardwoods, near Manchester, Tenn. Land is underlaid with coal. Will sell timber only, or timber and land together. K. McKENZIE, Owner, 619 Andrus Bldg., Minneapolis, Minn.

ARE YOU INTERESTED IN GUM

and Red Oak?

I own in fee simple two small and carefully selected tracks of high-class gum and red oak stumpage. Will sell at price to make the buyer good money either as an investment or as an operating proposition.

Will deal with principals only. Address in confidence, "BOX 22," care HARDWOOD RECORD.

TIMBER INVESTORS

One hundred pieces timber located all parts United States. For complete list, write J. J. CRANDALL & SON, Wellsville, N. Y.

TIMBER LANDS WANTED

WANTED TO BUY

400 or 500 acres of good hardwood timberland, mostly oak and ash, suitable for bending purposes. Address

"BOX 125," care HARDWOOD RECORD.

TIMBER WANTED

WANTED—CROSS TIES

for treatment, 7" thick, 8½' long, sawed, pole and hewn. Red, pin, black, yellow oaks, hard maple and birch. For further particulars write R. A. BURY, Asst. Gen. Tie Agent, N. Y. C. Lines, Detroit, Michigan.

LUMBER FOR SALE

PLAIN AND QUARTER-SAWED OAK

For sale, 1/20, 1/16, 1/4, 3/4, 1 1/2, 3/4, to 12/4 thick. C. F. WHISLER, Hillsboro, O.

OAK, POPLAR, ASH

and all other hardwoods, in all grades and thicknesses, can be readily sold if advertised in the Wanted and For Sale section of HARDWOOD RECORD. If you have a large stock you want to sell try a few lines in this department and see what a lot of inquiries they will bring you.

FOR SALE

Car Curly Poplar, largely 4/4.

2 cars 4/4 No. 1 Common Poplar

3 cars 8/4 No. 2 Common Poplar

Address P. O. BOX 174, Hickory, N. C.

DIMENSION STOCK FOR SALE

FOR SALE

50,000 feet 1" Oak Tie Siding, 75% white oak, 4" and over wide, 8' long. Large per cent clear boards. E. W. PRATT, JR., Hopkinsville, Ky.

DIMENSION STOCK WANTED

WANTED—TWO CARS EACH:

1x3x16

1x2½x16

1x1x16

THE NORTHERN CHAIR CO., Grafton, Wis.

WANTED

Glued-up Oak, Ash or Chestnut dimension stock, 4/4 and 5/4 from six (6) inches to twenty (20) inches long, suitable for plumbers' woodwork. Terms 2% cash. Address, H. SINTER, 33 Ellery St., Brooklyn, N. Y.

WANTED—A LARGE QUANTITY

Of good hard maple and hickory billets, 2½" and 2¾" square, 48", 54", 60", 66" and 72" long. J. H. STILL MFG. CO. LTD., St. Thomas, Ont., Canada.

WANTED

1" Oak dimension stock, 3½ and up random width, 34½ and 44" long. One face clear. Also 1½x2x46" clear Oak Posts. JACOB JAECKLE FURN. CO., Buffalo, N. Y.

WANTED

DIMENSION OAK

Plain and Quartered

Various sizes for chair and table factories. Send to us for specifications and prices.

INDIANA QUARTERED OAK CO.

7 East 42nd Street,
New York.

LUMBER WANTED**WANTS RED AND WHITE OAK**

A Canadian manufacturing company is in the market for a quantity of plain Red and White and quarter-cut White Oak, 3 1/4 to 8 4, and will contract for entire cut in these woods in No. 2 common and better grades from either small or large mills. Send particulars of quantity and where located, and best price f. o. b. cars at shipping point. Address, "BOX 24," care HARDWOOD RECORD.

WANTED

100,000 feet 3" FAS and No. 1 com. Hard Maple, green or dry. Box 457, South Bend, Ind.

CHARLES C. CROSS,

5436 Baltimore Ave.,
Philadelphia, Pa.

Commission salesman: selling direct to the trade in New York, Pennsylvania, New Jersey and Maryland. Stock and price lists solicited from reliable shippers.

WANTED

Hickory in car lots. Suitable for making handles. Specify percentage of whitewood, and quote price to ST. MARYS WOOD SPECIALTY CO., LIMITED, St. Marys, Ontario, Canada.

BUYERS OF HARDWOODS.

Do you want to get in touch with the best buyers of hardwood lumber? We have a list, showing the annual requirements in lumber, dimension stock and veneers and panels of consumers of those materials throughout the United States and Canada. The service is free to advertisers in the RECORD. It will interest you. Write us for further information about our "Selling Lumber by Mail System."

HARDWOOD RECORD, Ellsworth Bldg.,
Chicago.

BUSINESS OPPORTUNITIES**LOOK—LOOK—LOOK**

For Sale—A Model Furniture Factory at a bargain price. The property is located in the thriving city of Poughkeepsie; is now being used as a chair factory; is fully equipped with wood-working machinery and in good condition. Will be sold as a going business or otherwise as purchaser may desire. Apply direct to KAAL ROCK CHAIR CO., P. O. Box 378, Poughkeepsie, N. Y.

FOR SALE

Plant, real estate, power, blower, heating, lighting and machinery equipment of the Pillsbury & Baldwin Co., manufacturers of tanks and seats. New factory building with 22000 square feet floor space, Andrews dry kiln. Two railroad sidings, in the heart of the native timberlands, every detail up to the minute. Write for descriptive circular, terms, etc.

PILLSBURY & BALDWIN CO., St. Johnsbury, Vt.

EXCELLENT OPPORTUNITY

for man to go in manufacturing business. Have well-equipped hardwood factory suitable for making spokes and vehicle stock. Healthy location in town six thousand, on two rivers and two railroads. Address

"BOX 72," care HARDWOOD RECORD.

MACHINERY FOR SALE**FOR SALE**

- 1 Berlin band resaw No. 284.
- 1 Jointer attachment for same.
- 1 Berlin double surfacer No. 177.
- 1 Berlin single inside moulder No. 15.
- 1 Berlin twin matcher No. 46.
- 1 Circular bevel siding resaw, Fay & Egan No. 1.
- 1 Fay & Egan 9" outside moulder No. 181.
- 1 8" Smith inside moulder.

The above machinery all in strictly first-class condition and modern. Offering for sale on account of change in our product. Will be sold cheap for cash. For further particulars address YELLOW POPLAR LBR. CO., Coal Grove, O.

FOR SALE CHEAP

One No. 88 new Berlin matcher. Inquire of GEO. E. SPRY, 1003 Harris Tr. Bldg., Chicago.

FOR SALE

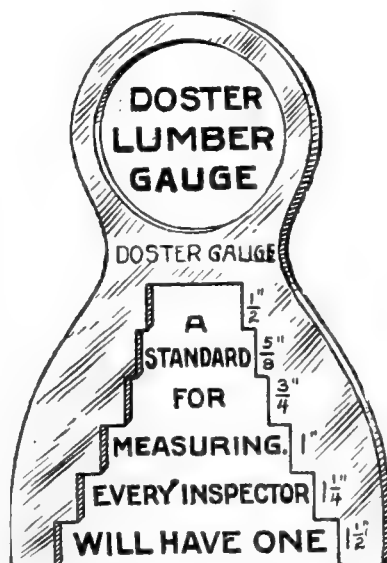
3 hydraulic veneer presses; five pumps, 2 and 3 plunger; 12 pumps, single; 190 retainers; 1 glue roll. All well-known makes. Cheap. CHAS. F. ELMES ENGINEERING WORKS, 228 N. Morgan St., Chicago.

MISCELLANEOUS**FOR RENT—CINCINNATI YARD**

150x100' on Southern R. R. with switch facilities. T. P. SCOTT & CO., Cincinnati, O.

FOR SALE OR RENT

400 feet of choice dock property on Laflin Street. Hardwood lumber yard preferred. Address FREDERIC T. BOLES, 2424 South Laflin Street, Chicago, Ill.



For sale by HARDWOOD RECORD,
537 S. Dearborn St., Chicago, Ill.
50 CENTS EACH.

Gerlach Modern Machines
Produce the Cheapest and Best
COOPERAGE STOCK
and **BOX SHOOKS**
Circular, Band and Cylinder Saws,
SAW AND LOG TOOLS
THE PETER GERLACH CO., Cleveland, 6th City, U.S.A.

CHICAGO**FRED D. SMITH****HARDWOOD LUMBER**

1337-1343 North Branch St. CHICAGO

E. H. KLANN

Cottonwood, Gum, Oak, Ash, Cypress, Yellow Pine, Dimension Stock

819 FISHER BLDG.

HAR. 1187

Osgood & Richardson

935 Peoples Gas Bldg.

**NORTHERN AND SOUTHERN
HARDWOODS**

Chicago Agents: LAMB-FISH LUMBER CO.

Telephone Canal 1688

CHAS. DARLING & CO.**HARDWOOD LUMBER**

22nd Street and Center Avenue
CHICAGO

McParland Hardwood**Lumber Co. 2204 S. Laflin St.****HARDWOODS**

A Veneer Gauge is the answer to a Veneer User's craving for years. This "Walker Brand" Veneer Gauge is a steel gauge that will satisfy your wants for all time. You can't do yourself a better turn than to buy one of these gauges. It gauges ACCURATELY every thickness from 1/40 inch to 1/2 inch INCLUSIVE. Wake up to this opportunity. Price only \$1.98 delivered by U. S. Mail. Order now, today. Address—6456 Woodlawn Ave. Phone Hyde Park 88.

WALKER BRAND
CHICAGO

99% PURE
SILICA
OR SILEX FOR WOOD FILLERS
TAMMS SILICA CO., 19 So. 5th Ave., Chicago

COUNTERFEIT CHECKS

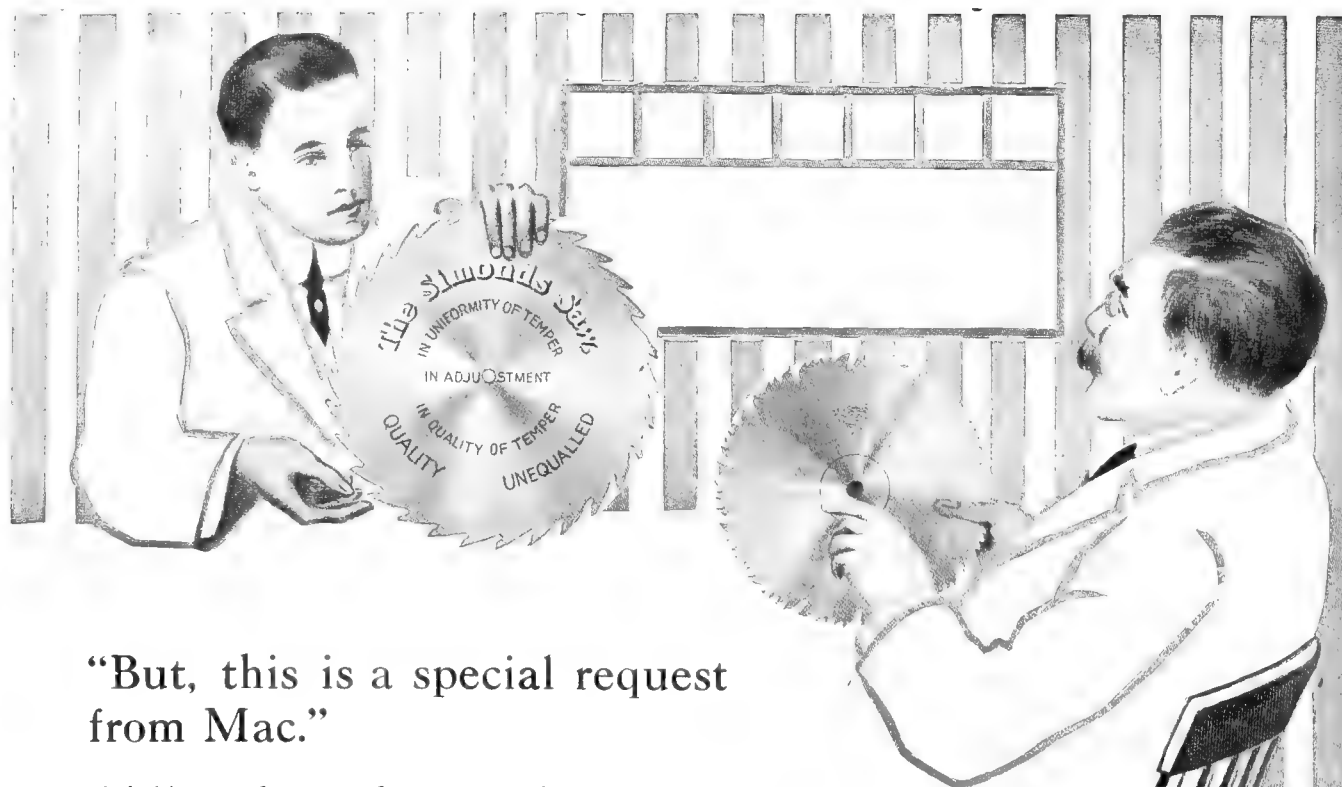
are frequent
except where
our

Two Piece
Geometrical
Barter Coin
is in use, then
imitation isn't
possible.
Sample if you
ask for it.

S. D. CHILDS
& CO.
Chicago

We also make
Time Checks,
Stencils and
Log Hammers.





"But, this is a special request from Mac."

"All right, John, go ahead and buy them; if Mac says he wants Simonds Saws throughout the factory, let's have them."

"Shall I include an order for some of the Novelty Saws?"

"Yes, of course; for that fine work of ours Simonds Novelty Saws will be just the thing. Mac has tried out this one, and say—you would be surprised to know that a saw can make such a smooth cut."

Buyers of Saws, Planer Knives, or Files for factory and mill use should remember that the Simonds reputation does not rest alone in Big Circular and Wide Band Saws, but that our Small Saws are equally desirable.

Catalog sent or prices quoted promptly. Address any office.

Simonds Manufacturing Company

Fitchburg, Mass.
New York City.
Portland, Ore.

Chicago, Ills.
New Orleans, La.
Vancouver, B. C.

Montreal, Que.
San Francisco, Cal.
Seattle, Wash.

Lockport, N. Y.
London, Eng.
St. John, N. B.

ATKINS ALWAYS AHEAD

Made
of
Silver
Steel

Tough
and
Hard

But
Not
Brittle

They
Save
Expense

Made
By
Mechanics

Who
Know
How

Stand
Up
Longest

Try
These
Fine
Saws

They'll
Make
Good

Finest
On
Earth

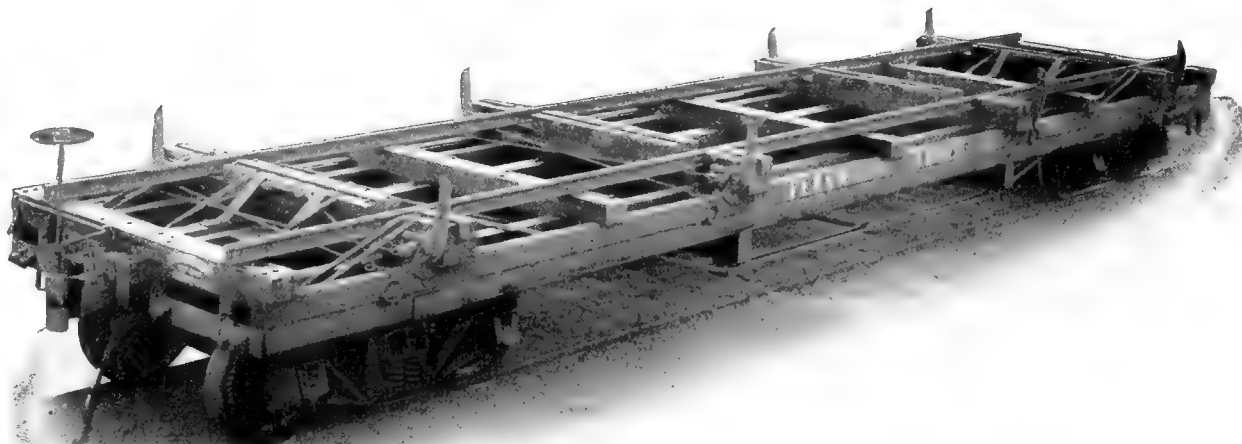
A Perfect Saw For Every Purpose BAND SAWS, CIRCULAR SAWS, including ATKINS Famous INSERTED TOOTH SAWS, GANG and EDGER SAWS, CROSS CUT SAWS.
ATKINS MACHINE KNIVES, Factory, Lancaster, N. Y.

If you cannot secure Genuine Atkins Saws from your usual source, write to nearest address below.

E. C. ATKINS & CO., Inc., THE SILVER STEEL SAW PEOPLE **Home Office and Factory, INDIANAPOLIS, IND.**

Branches carrying complete stocks in the following cities. Address E. C. ATKINS & CO. Atlanta, New Orleans, Seattle, Chicago, New York City, Memphis, Portland, Minneapolis, San Francisco. Canadian Factory—Hamilton, Ont. Branch at Vancouver, B. C.

RUSSEL LOGGING CARS



70,000 LBS. CAPACITY SKELETON TYPE RUSSEL CAR, EQUIPPED WITH LOADER RAILS AND RUSSEL PATENT DROP STAKES. THIS CAR COMPLIES WITH M. C. B. RULES AND SAFETY APPLIANCE ACTS.

Years of Hard Service Have Demonstrated Russel Cars to be Superior in Quality and Construction. Built for any Capacity Desired

RUSSEL WHEEL AND FOUNDRY CO.

DETROIT, MICHIGAN

The CHEAPEST HARDWOOD LOGGING

IS DONE WITH

LIDGERWOOD CABLEWAY SKIDDER



LIDGERWOOD MFG. CO.
96 Liberty Street, New York

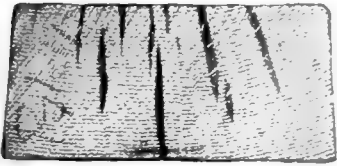
Branch Offices
CHICAGO SEATTLE
Agencies
NEW ORLEANS-WOODWARD, WIGHT & CO. LTD.
CANADA-ALLIS CHALMERS BULLOCK LTD.
MONTREAL VANCOUVER

IF YOU HAVEN'T SEEN THE GIBSON TALLY BOOK

Let us send you one on approval, with samples of Tally Tickets for triplicate, duplicate or single tallies—a score of forms to choose from. They are the latest and best. Endorsed by hundreds of lumber manufacturers and buyers.

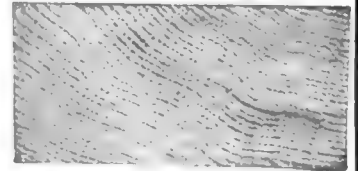
HARDWOOD RECORD

CHICAGO



Lumber Dried As Never Before SEE THE DIFFERENCE

GRAND RAPIDS DRY KILN
GRAND RAPIDS VENEER WKS., SOLE MFRS., MICHIGAN



HARDWOOD RECORD'S

strongest circulation is in the region where things are made of wood—WISCONSIN, MICHIGAN, ILLINOIS, INDIANA, OHIO, PENNSYLVANIA, NEW YORK and the East.

IT'S the BEST SALES MEDIUM for HARDWOOD LUMBER

MORE THAN 2,000 LUMBERMEN

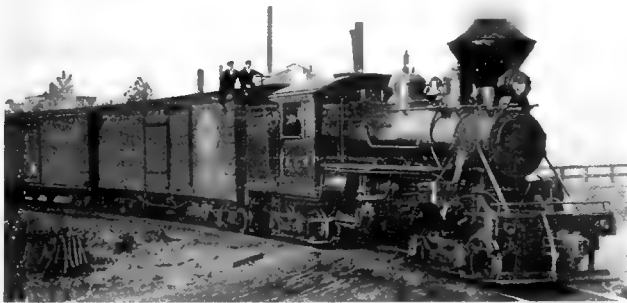
are using the new Gilson "Tree & Bush" tickets. They are made of triple-plate ticklers. If you have not seen them, send for one with specimen tickets attached. They solve your shortage and inspection troubles.

HARDWOOD RECORD

CHICAGO

Baldwin Geared Locomotive

Logging Locomotives must operate on steep grades, sharp curves and uneven tracks. This is what the geared locomotive illustrated has been designed to do. It is symmetrical in construction, and power is transmitted to the axles through a central drive. The valve motion is simple and accessible, and all new features have been tried out in service.



This locomotive is well-designed, well-built and fully guaranteed. Various sizes can be furnished, to suit different track and operating conditions.

THE BALDWIN LOCOMOTIVE WORKS
PHILADELPHIA, PA., U. S. A.

Cable Address:—"Baldwin, Philadelphia"

Branch Offices:

New York, N. Y., Hudson Terminal; St. Louis, Mo., Wright Building;
Chicago, Ill., Railway Exchange; Portland, Ore., Spalding Building;
Richmond, Va., Travelers Building.

Corrugated Joint Fasteners

Can be quickly and cheaply driven with

"ADVANCE" CORRUGATED JOINT FASTENER MACHINE

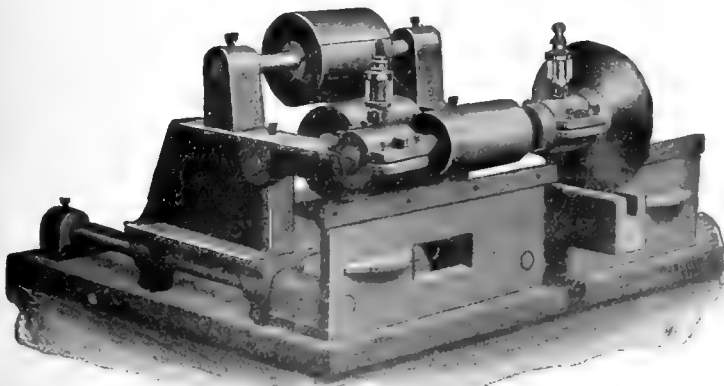
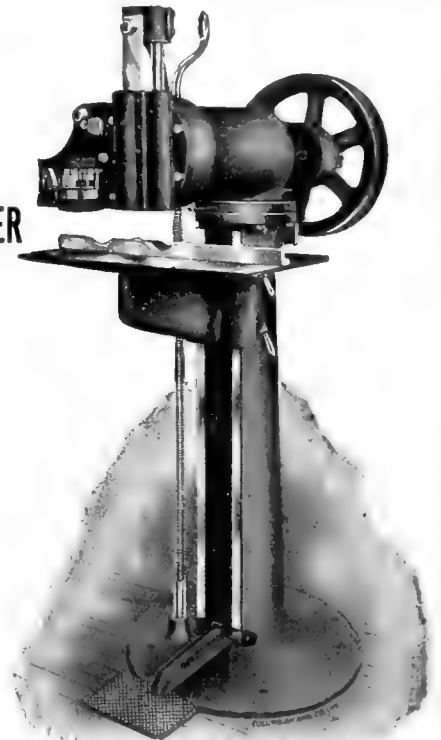
Made in Different
Types to Meet
All Conditions

Specially suitable for
manufacturers of
sash, doors, blinds,
screens, coffins,
furniture, plumbers'
wood-work, porch
columns, boxes,
refrigerators, etc.

Write for bulletins
and prices.

Manufactured only
by

Saranac Machine Co., St. Joseph, Michigan



BUTTING SAW for Flooring Factories

For cutting out defects and making square and smooth ends for end-matching machines. Used by the largest producers. Write for particulars and prices.

Manufactured by

Cadillac Machine Co.
CADILLAC, MICH.

Westinghouse Motors form the Reliable Drive for Wood-Working Plants



AFTER Westinghouse motors are properly installed in a wood-working plant, the only attention they require is an occasional cleaning, inspection and lubrication. Beyond this, there is nothing to be done.

They are ready to start any moment they are wanted and they keep the machines they drive in continuous operation until the power is shut off. They are very rarely out of commission for repairs. Their life is very long; some of the first Westinghouse motors are still in successful operation.

Such reliability is the result of long experience in design, thorough study of operating conditions, and great care in manufacture. These factors combine to make Westinghouse motors more reliable than the service conditions, for which they are intended, require.

Of course, like any other machines, these motors must be properly installed. Westinghouse service takes care of this detail by giving full information on the installation of Westinghouse motors in any plant.

To receive full assurance of motor reliability, specify "Westinghouse Motors."

Westinghouse Electric & Mfg. Co., East Pittsburgh, Pa.

Sales Offices in all Large Cities.



One of the largest hardwood operators in the U. S. says:



Costs 50 cents per M.

From the time we stop skidding we can move the machine from 200 lbs. to 1/4 mile, and be skidding again in thirty minutes. There is no comparison in the old and new way of moving the machine, and skidding logs. We think your skidder is the best on the market, and there is no comparison to be made between the ground skidder and overland system for hardwood timber.

Yours tr

(Copy of complete letter sent on request)



You should investigate the

Clyde Self-Propelling Skidder

It means more logs for less money than by any other method—and we can prove it!

CLYDE IRON WORKS Manufacturers, at Duluth, Minn., U. S. A.
of CLYDE-GRADE Logging Machinery

"Call for our new Catalog No. ONE!"



WISCONSIN



WHERE THE FINEST NORTHERN HARDWOODS GROW

WE MANUFACTURE MICHIGAN
HARDWOODS AND HEMLOCK.
MILLS ELECTRICALLY
DRIVEN; STOCK
BAND SAWN

Have in Shipping Condition

BIRCH: NO. 2 AND BETTER, 4/4 to 12/4
ASH: NO. 2 AND BETTER, 4/4 to 12/4
ELM: NO. 2 AND BETTER, 4/4 to 12/4
BASSWOOD: NO. 2 AND BETTER, 4/4
to 12/4

WE are well equipped for manufacturing
special sizes, wagon stock, skids, ties, etc.

THE C. A. GOODYEAR LUMBER COMPANY

Office and Mill
TOMAH, WISCONSIN

Logging Camp
BLUE BILL, MICHIGAN

SAWYER GOODMAN CO.

MARINETTE, WIS.

Mixed Cars of Hardwood, Bass-
wood, White Pine and Hemlock,
Cedar Shingles and Posts

We make a specialty of White Pine Beveled Siding and
White Pine Finish and Shop and Pattern Lumber

How About Birch?

Are your stocks complete?

*We can furnish Dry Birch
in all thicknesses, all grades*

LET US QUOTE YOU PRICES

OELHAFEN LUMBER CO.

TOMAHAWK, WISCONSIN

GET OUR PRICES ON

1 car 1" No. 1 Common & Btr. Red Birch.
10 cars 1" No. 2 Common & Btr. Plain Birch.
5 cars 1" No. 1 and No. 2 Common Plain Birch.
2 cars 1¼" No. 2 Common & Btr. Plain Birch.
2 cars 1½" No. 2 Common Plain Birch.

Can ship in straight or
mixed cars with other lumber

ROBBINS LUMBER COMPANY

Rhineland, Wisconsin

The Tegge Lumber Co.



MILWAUKEE
WISCONSIN



BUYERS OF
ALL KINDS OF

HARDWOOD LUMBER

IF YOU HAVEN'T SEEN THE GIBSON TALLY BOOK

Let us send you one on approval, with samples of Tally
Tickets for triplicate, duplicate or single tallies—a score
of forms to choose from. They are the latest and best. En-
dorsed by hundreds of lumber manufacturers and buyers.

HARDWOOD RECORD

CHICAGO

M I C H I G A N

FAMOUS FOR HARD MAPLE AND GREY ELM

"Ideal" ^{Steel Burnished} Rock Maple Flooring

is the flooring that is manufactured expressly to supply the demand for the best. It is made by modern machinery from carefully-selected stock and every precaution is taken throughout our entire system to make it fulfill in every particular its name—"IDEAL."

ROUGH OR FINISHED LUMBER—ALL KINDS

Send Us Your Inquiries

The I. Stephenson Company - **WELLS, MICHIGAN**

FORMAN'S FAMOUS OAK FLOORING

Is made in faultless fashion from the most uniform-colored and even-textured oak produced: worked from Kraetzer-Kured lumber manufactured at our

Heidelberg, Ky., sawmills.

Thomas Forman Company

Detroit : : : : Michigan

Von Platen Lumber Co.

Iron Mountain, Michigan

MANUFACTURERS OF

BIRCH BASSWOOD ELM MAPLE

100 M Ft. 6/4 No. 1 and 2 Common Maple.

50 M Ft. 5/4 No. 1 and 2 Common Maple.

75 M Ft. 4 4 No. 1 Common Birch.

40 M Ft. 5/4 No. 1 and 2 Common Birch.

We Solicit Your Inquiries

SHIPMENTS VIA C. & N. W.—C., M. & ST. P.—W. & M.

"Chief Brand" Maple and Beech Flooring

in $\frac{3}{4}$, $\frac{5}{8}$ and 13-16 and 1 1-16 inch Maple in all standard widths and grades, will commend itself to you and your trade on its merits alone

WRITE US, WE CAN INTEREST YOU

Kerry & Hanson Flooring Co.

GRAYLING, MICHIGAN

We Offer:

About 500M No. 3 Maple.

About 800M No. 2 Common and Better Basswood.

To be cut during 1913

On hand dry, 30 M 4/4 No. 1 Com. and Better Hard Maple.

LATH
SHINGLES

MICHIGAN
HARDWOODS

PINE AND
HEMLOCK

East Jordan Lumber Co.

East Jordan, Michigan

MAKERS OF IMPERIAL MAPLE FLOORING

C If you are not a subscriber to **HARDWOOD RECORD** and have a suspicion that you would like to see a copy, it is yours for the asking.

S. L. EASTMAN FLOORING CO.

SAGINAW BRAND

MAPLE FLOORING

SAGINAW, MICH.

For Prompt Shipment

Basswood—100,000 ft. 5/4 No. 2 Common & Better.

Soft Maple—25,000 ft. 4/4 & 8/4 Log Run M. C. O.

White & Red Oak—12,000 ft. Log Run M. C. O.

Black Walnut—3,000 ft. Log Run M. C. O.

STRUTHERS COOPERAGE CO., Romeo, Michigan

VENEERS AND PANELS

The Central Veneer Co.

**SOFT YELLOW POPLAR
CROSS BANDING**

Huntington, West Virginia

B. C. JARRELL & CO.

MANUFACTURERS OF

Rotary-Cut Gum and Poplar

VENEERS

Well manufactured, thoroughly
KILN DRIED and FLAT

HUMBOLDT, - TENNESSEE

KANSAS CITY, MO.

HELENA, ARK.

VENEERS

PENROD WALNUT & VENEER COMPANY

General Offices, KANSAS CITY, MO.

KENTUCKY VENEER WORKS

ROTARY CUT
GUM, POPLAR, OAK

SAWED AND SLICED
QUARTERED OAK, MAHOGANY

LOUISVILLE, KENTUCKY



For items of Hardwood Stock or Hardwood Machinery, you will find it advantageous to write our advertisers. Get in touch!

CIRCASSIAN

MAHOGANY

Logs VENEERS Lumber

WE IMPORT

WE MANUFACTURE

All Thicknesses of Mahogany
Ready for Shipment

RICE VENEER & LUMBER CO.

GRAND RAPIDS, MICH.

Hoffman Brothers Company

**Sliced and Sawed, Quartered
and Plain Red and
White Oak**

Walnut Cherry Ash Maple

Let us Send You Our Stock List **FORT WAYNE, IND.**



HARDWOOD RECORD is a different kind, and altogether better lumber newspaper than has hitherto been published. This is made possible by the loyal co-operation and support of the hardwood element of the lumber industry. If you are a subscriber you will agree.

ESTABLISHED 1869

**Adams & Raymond
Veneer Co.**

INDIANAPOLIS, INDIANA

MANUFACTURERS

OF

**PLAIN & FIGURED
VENEERS**

**CIRCASSIAN } WALNUT
AMERICAN }**

QUARTERED OAK

ANY THICKNESS

ANY WOOD

veneers AND PANELS

Ahnapee Veneer & Seating Co.

HOME OFFICE, FACTORY AND VENEER MILL, ALGOMA, WIS.
VENEER AND SAWMILL, BIRCHWOOD, WIS.

We manufacture at our Birchwood plant single ply veneers of all native northern woods and deliver stock that is in shape to glue.

From our Algoma factory, where we have specialized for twenty years, we produce panels of all sizes, flat or bent to shape, in all woods, notably in Mahogany and Quarter-Sawed Oak.

We make no two-ply stock, and do not employ sliced cut quartered oak. Our quartered oak panels are all from sawed veneer.

Every pound of glue we use is guaranteed hide stock. We do not use retainers. Our gluing forms are put under powerful screws and left until the glue has thoroughly set.

If you seek a guaranteed product that is the best, based on results accomplished by most painstaking attention and study of every detail, combined with the use of the best stock and an up-to-date equipment, our product will appeal to you.

If you are a "price buyer" we probably cannot interest you.

KIEL WOODEN WARE CO.

WHEN IN THE MARKET FOR ROTARY CUT

BIRCH
BASSWOOD
OAK
ASH
ELM

VENEER

Write Us

WISCONSIN

KIEL
FACTORY AND MAIN
OFFICE

MELLEN
VENEER AND HEADING
MILL

MUST MOVE BY JAN. 1

EXTRA!

EXTRA!

Panels—3 ply—good 1 side

3/16 Ash, 24x60 1/4 Ash, 24x60 1/4 Basswood, 24x60
30x60 30x72

IN STOCK AT CHICAGO WAREHOUSE, 1140 WEST LAKE STREET
TELEPHONE HAYMARKET 3027

Wisconsin Seating Co.

New London, Wis.

HOWARD HANSON, President

THOMAS A. TURNER, Secy. and Treas.

THE HANSON-TURNER COMPANY

MANUFACTURERS OF

ROTARY CUT VENEER AND THIN LUMBER

ELM
BEECH
CURLY BIRCH

OAK
MAPLE

BIRCH
BASSWOOD
BIRD'S-EYE MAPLE

SPECIALTIES:

DRAWER BOTTOMS BACK PANELS CENTER STOCK
BACKING PIANO PIN BLOCKS BIRCH DOOR STOCK
CURLY BIRCH BIRD'S-EYE MAPLE

OFFICE and FACTORY at WELLS, N. Y.

VENEERS AND PANELS

OUR SPECIALTY

Highly Figured Quarter-Sawed White Oak Veneer



PUTNAM VENEER & LUMBER CO.
ROACHDALE, IND.

H. I. CUTSINGER, Gen'l Mgr.

Custom Mill Work, Storage, Inspection ON Foreign Fancy Woods, Mahogany, Cedar, Circassian

We receive the logs, store or warehouse them, manufacture them into lumber, cut or saw veneers, pile and store the product, and ship via any railroad. Also furnish inspection returns on logs or lumber. Can furnish accommodations and economies which it is impossible to secure elsewhere. We always have on our yards parcels of plain and figured African, Mexican and Cuban Mahogany, Circassian Walnut and Cedar logs, placed here for sale by direct foreign shippers, from which advantageous purchases can be made.

Astoria Veneer Mills & Dock Co.

Long Island City, New York

Veneers and Panels with a Reputation

WE manufacture Veneers in all the native woods and for all purposes. Also Built-up Panels in native and foreign woods—three and five-ply—and have established a reputation for furnishing high-grade material. Send us your inquiries and orders and become one of our satisfied customers.

Underwood Veneer Co.

Wausau, Wis.

“SOVEMANCO.”

We can furnish anything you want in

Sawed and Sliced Foreign and Domestic Figured Veneers

Capacity 15 million feet per year. Ready to take care of carload orders promptly. Small orders shipped same day received, if desired.

SOUTHERN VENEER MFG. CO., Inc.

Office, 21st and Standard.

LOUISVILLE, KY.

Mills, Magnolia, Standard and 21st Sts.

THE SOUTH

PROMINENT SOUTHERN MANUFACTURERS

ANY REASONABLE OFFER

WILL BUY THE FOLLOWING STOCK:
DRY—IN FINE CONDITION

6,000 ft. 3/4" 1s-2s Qrtd. White Oak, 6" & up.	5,000 ft. 5/4" No. 2 Com. Qrtd. White Oak.	20,000 ft. 6/4" 1s-2s Qrtd. Red Oak, 6" & up.
8,500 ft. 3/4" No. 1 Com. Qrtd. White Oak, 6" & 7".	5,700 ft. 2 1/4" Com. & Bet. Plain White Oak.	15,000 ft. 8/4" 1s-2s Qrtd. Red Oak, 6" & up. Very wide run.
5,000 ft. 6/4" No. 1 Com. Qrtd. White Oak.	35,000 ft. 4/4" No. 2 Com. Red & White Oak.	17,000 ft. 4/4" 1s-2s Qrtd. Poplar.
2,700 ft. 5/8" No. 2 Com. Qrtd. White Oak.	40,000 ft. 4/4" 1s-2s Qrtd. Red Oak, 6" & up.	7,500 ft. 4/4" 1s-2s Yel. Poplar, 7" & up wide.
35,000 ft. 4/4" No. 2 Com. Qrtd. White Oak.	15,000 ft. 5/4" 1s-2s Qrtd. Red Oak, 6" & up.	13,000 ft. 5/4" Com. & Bet. Poplar, 13" & up.
		26,000 ft. 6/4" Clear Saps. Good widths and lengths.
		38,000 ft. 6/4" No. 1 Common. Good widths and lengths.

We, of course, have a complete stock of Quartered and Plain Oak, Poplar and Hickory, etc., in all grades and thicknesses; and will be glad to have your inquiries for anything you may need.

J. V. STIMSON & CO.

OWENSBORO, KY.

WE MANUFACTURE AND
DEAL IN

TIES, HARDWOOD LUMBER AND TIMBER

We want to buy a large
amount of 4/4, 8'—8'6"
Oak from Tie Sides

Hill Bros. Tie & Lumber Company
Charleston, W. Va.

Boice Lumber Co., Inc.

Southern Hardwoods

MAIN OFFICE
RICHMOND, VIRGINIA

Yards: NORFOLK, ABINGDON, GRAHAM, VA.,
and NORTH WILKESBORO, N. C.

Louisiana Long Leaf Lumber Co.

Fisher, Louisiana

Diamond



Brand

OAK FLOORING
A GUARANTEE OF PERFECTION

SAVE YOUR MONEY BY USING THE

RED BOOK

Published Semi-annually
in February and August

It contains a carefully prepared list of the buyers of lumber in car lots, both among the dealers and manufacturers.

The book indicates their financial standing and manner of meeting obligations. Covers the United States, Alberta, Manitoba and Saskatchewan. The trade recognizes this book as the authority on the lines it covers.

A well organized Collection Department is also operated and the same is open to you. Write for terms.

Lumbermen's Credit Assn., ESTABLISHED 1878

608 So. Dearborn St.
CHICAGO

Mention This Paper.

116 Nassau Street
NEW YORK CITY

If you want to reach the wholesale consumers of hardwood lumber throughout the United States, a HARDWOOD RECORD advertisement will do it for you.

If you want to reach the hardwood manufacturers of the United States, a HARDWOOD RECORD advertisement will do it for you.

The HARDWOOD RECORD represents high-class, special, class circulation, with a minimum of waste circulation.

Ask any HARDWOOD RECORD advertiser for experience on results.

THE SOUTH

PROMINENT SOUTHERN MANUFACTURERS

GARETSON-GREASON LUMBER CO.

1002-1005 Times Bldg. ST. LOUIS

MANUFACTURERS

Three Mills

Frank Purcell

Kansas City U. S. A.

Exporter of Black Walnut Logs



FIGURED WALNUT IN LONG WOOD
AND STUMPS

WE ARE TOO BUSY MAKING

Good Gum Goods

TO HATCH OUT ANY FOXY
GRADE-MIXING SCHEMES!

**Himmelberger-Harrison
Lumber Company**

Cape Girardeau, Missouri

William S. Whiting

MANUFACTURER AND WHOLESALE

WHITE PINE

BASSWOOD

BIRCH

BUCKEYE

CHESTNUT

MAPLE

POPLAR

OAK

ASHEVILLE, N. C.

Salt Lick Lumber Co.

SALT LICK KENTUCKY

MANUFACTURERS OF



Oak Flooring

Complete stock of 3/8" and 13/16" in all
standard widths

WE HAVE IT

W. W. DEMPSEY

Manufacturer and
Wholesaler of

HARDWOODS

BAND SAWED STOCK

A LINE BRINGS PRICE BY RETURN MAIL

General Offices
Johnstown, Pa.

New York Office
No. 18 Broadway

CHERRY

1 Car 4/4
Log Run
Mill Cull
Out.

OAK

\$4,000 ft. 4/4
Log Run
Quartered.

CYPRESS

250,000 feet
of 4/4 No. 1
Common &
Better. Old
grading.

SPRICE

4/4 and 8/4
Clear and
Select 8/4
Box

"WE ARE GETTING RESULTS"

WRITES ONE ADVERTISER

This Means That He Is Getting

NEW BUSINESS

Through His Ad

If we can do it for him is there any logical
reason why we can't for you?

MAKE US PROVE IT

HARDWOOD RECORD, CHICAGO

Baker-Matthews Manufacturing Co.

Sikeston, Mo.

Band Sawn Southern Hardwoods

SPECIALTIES

RED GUM, PLAIN OAK

SEND US YOUR INQUIRIES

BUFFALO

The Foremost Hardwood Market of the East

Hugh McLean Lumber Co.

OUR SPECIALTY:

**QUARTERED
WHITE OAK**

940 ELK STREET

I. N. Stewart & Bro.

Specialties

Cherry and Oak

892 Elk Street

Standard Hardwood Lumber Co.

**OAK, ASH and
CHESTNUT**

1075 Clinton Street

BUFFALO HARDWOOD LUMBER CO.

We want to buy for cash

OAK, ASH AND OTHER HARDWOODS

All grades and thicknesses.
Will receive and inspect stock at shipping point.
Branch yard, Memphis, Tenn.

940 Seneca Street,

BUFFALO

T. SULLIVAN & CO.

SPECIALTIES:

Gray Elm, Brown Ash

Pacific Coast Fir and Spruce

2 ARTHUR STREET

ORSON E. YEAGER

SPECIALTIES:

Oak, Ash and Poplar

932 ELK STREET

ANTHONY MILLER

**HARDWOODS
OF ALL KINDS**

893 EAGLE STREET

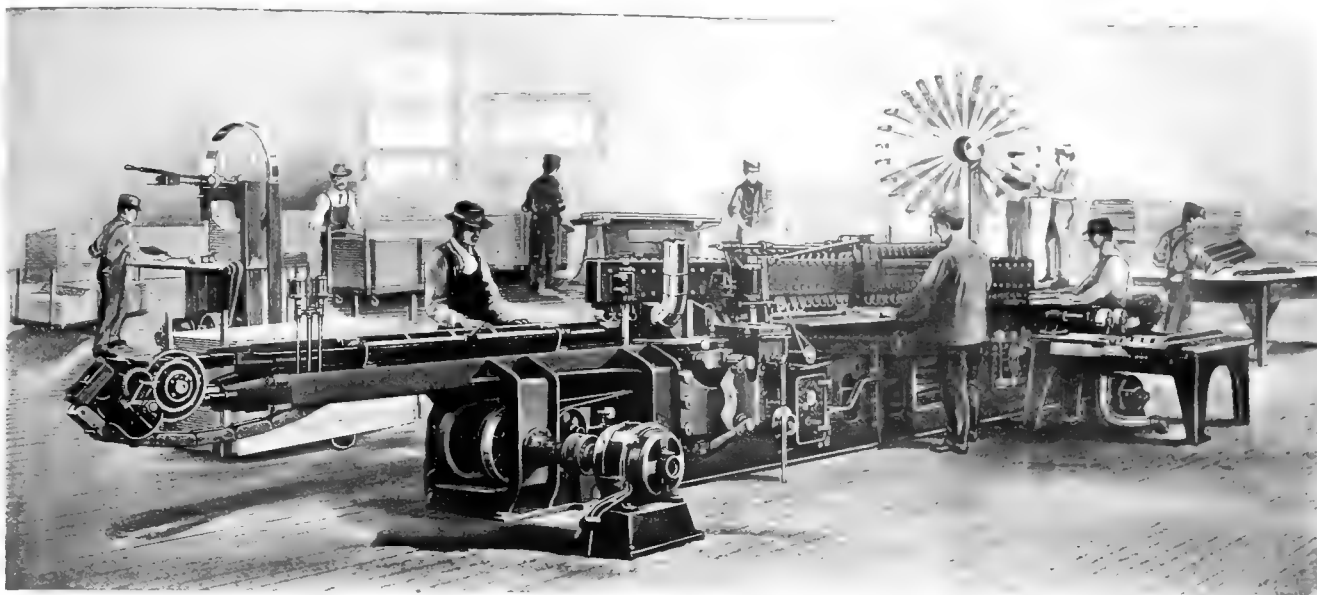
G. ELIAS & BRO.

HARDWOODS

White Pine, Yellow Pine, Spruce,
Hemlock, Fir, Lumber, Timber, Mill-
work, Boxes, Maple and Oak Flooring

955-1015 ELK STREET

The above firms carry large and well assorted stocks of all kinds and grades of Hardwoods, and have every facility for filling and shipping orders promptly. They will be pleased to have your inquiries.



Automatic Dovetail Jointing Produces Strong Resawed Stock

THE method of jointing lumber automatically at one operation offers many advantages in building fine furniture, besides the strength and quality of the tapered wedge dovetail glue joint. There is a big advantage in being able to joint rough edge lumber without ripping or squaring the edge; the economy in floor space by jointing on one machine, the exclusion of trucking, the saving of lumber labor and glue that is made by the "Linderman" Automatic Dovetail Glue Jointer, Gluer, Clamper and Sizer are points that are invaluable to every builder of furniture.

If you so desire, samples of the kind of work you are making will be sent you.

Linderman Machine Company

Muskegon, Michigan

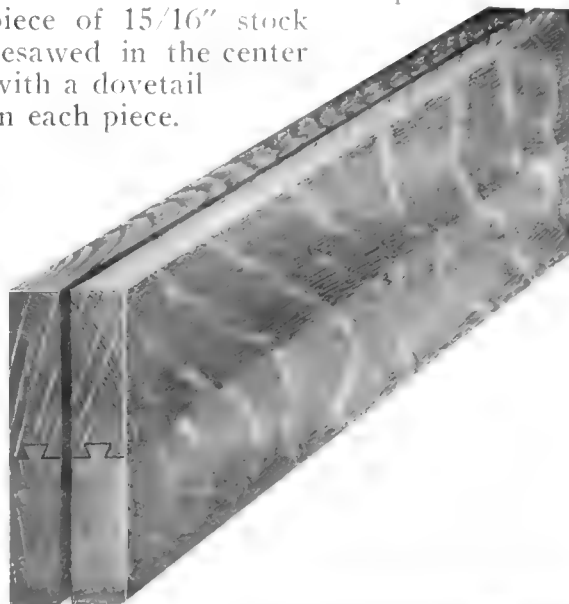
New York City
Knoxville, Tenn.

Woodstock, Ont.
St. Louis, Mo.

Resawing Dovetail Joints

The tight fitting dovetail joint can be resawed in any place; but where a great strength is required, the cutters can be placed so as to leave a dovetail in each resaw piece.

The illustration here represents a piece of 15/16" stock resawed in the center with a dovetail in each piece.



Vansant,

Manufacturers Old-Fashioned

5-8 and 4-4
in Wide Stock,
Specialty

Kitchen &

Soft
Yellow
Poplar

Company

Ashland, Kentucky

EASTERN REPRESENTATIVE, John L. Cochran
601 W. 115th Street, New York City

CHICAGO OFFICE, Steger Building
W. H. Matthias, Manager.

YOU pay a *little* more for our hardwood lumber than you do for many others', but it's worth *much* more.

With our modern and first-class equipment and expert operatives, we couldn't make bad lumber if we tried to, because the *quality* and *size* of our virgin tough mountain white ash, red birch, yellow poplar, buckeye, maple, red oak, cherry and basswood, averaging less than three logs to the thousand, and 95 per cent sixteen feet, is the best type of hardwood timber growth in the United States, and shows a larger percentage of *firsts*.

If you are a discriminating buyer, let's get acquainted.

LITTLE RIVER LUMBER COMPANY

Townsend, Tenn.

W. H. White Company Boyne City Lumber Company

Mills and General Office: BOYNE CITY, MICH.

Sales Office: BUFFALO, N. Y.

WE OFFER

4/4 and 5/4 No. 2 common and better
Basswood

4/4 No. 2 common and better Brown
Ash

4/4 and 5/4 No. 2 common and better
Birch, strictly unselected for color

4/4 and 5/4 No. 1 and No. 2 common
Flooring Maple.

4/4, 5/4, 6/4, 8/4, 10/4, 12/4 and 16/4
Firsts and Seconds Maple

STOCK DRY—STANDARD GRADES—BEST
MANUFACTURE—CAR OR CARGO SHIPMENTS

YELLOW POPLAR

MANUFACTURERS OF BAND SAWED

POPLAR
QUARTERED OAK
PLAIN OAK
CHESTNUT
BASSWOOD



SPECIALTY
QUARTER SAWED
WHITE OAK

Coal Grove, Ohio, U. S. A.

LUMBER CO.

Aardwood Record

Eighteenth Year, }
Semi-Monthly. }

CHICAGO, FEBRUARY 25 1913

{ Subscription \$2.
{ Single Copies, 10 Cents.



On the Foundation of Today's Good-Will

we are building the structure of tomorrow's bigger business.
Our aim is to make the "McIlvain Service" a source of continual satisfaction to our customers.

An important feature of this "McIlvain Service" is our Stock List—may we send it to you? A postal will do.

J. GIBSON McILVAIN & Co.
1420 Chestnut Street **Philadelphia, Pa.**

HOLLOWAY HARDWOODS

*The following Yellow Cottonwood
is band-sawn and runs*

60% 14' and 16'

COTTONWOOD

176,850 feet 4/4 1st & 2nd 6" to 12".

89,432 feet 4/4 1st & 2nd 13" & wider.

163,421 feet 4/4 No. 1 Common,
containing all the wide.

Holloway Hardwood Lumber Co.
20 W. Jackson Blvd. Chicago



**Cartier-Holland
Lumber Company**



WE want you to keep your eyes on this space every issue. We expect to make it mutually beneficial.

THIS is our first appearance here and as we are going to be with you for a long time, we want you to get better acquainted.

WE will appreciate your inquiries and every effort will be made to merit your patronage.



**Ludington
Michigan**



MICHIGAN

FAMOUS FOR HARD MAPLE AND GREY ELM

Michigan Hardwoods

MANUFACTURED BY

COBBS & MITCHELL, Inc.

CADILLAC, MICH.

February 14, 1913

DRY STOCK LIST

4/4 Birch 1s & 2s Red Curly and Wavy.....	1/2 M
4/4 Cherry No. 3 Common & Better.....	9 M
8/4 Rock Elm No. 3 Common.....	20 M

"It is not what lumber costs you, so much as what you can get out of it, that decides its value for your work."

OUR OWN MANUFACTURE

W. D. YOUNG & CO.

MANUFACTURERS

FINEST MAPLE FLOORING

KILN DRIED, HOLLOW BACKED
MATCHED OR JOINTED
POLISHED AND BUNDLED

Hard Maple, Beech and Birch Lumber

1 TO 6 INCHES THICK

WRITE FOR PRICES

BAY CITY, :

:

:

MICHIGAN

Mitchell Brothers Co.

Sales Department

Cadillac, Mich.

February 14, 1913

Dry Michigan Hardwoods

1x4 Basswood No. 1 Common.....	11 M
8/4 Cadillac Gray Elm 1s & 2s.....	2 M
8/4 Cadillac Gray Elm No. 1 & 2 Common.....	3 M
8/4 Rock Elm No. 3 Common.....	38 M
1x6 Maple 1s & 2s.....	35 M
1x9 Maple 1s & 2s.....	17 M
4/4 White Maple, End Dried.....	16 M
5/4 White Maple, End Dried.....	3 M
4/4 Birdseye Maple, End Dried.....	3 M

WE MANUFACTURE A SPECIAL GRADE OF HARDWOOD
FLOORING FOR FACTORY FLOORS

THE Kneeland-Bigelow Company

Hardwood Manufacturers

100,000 ft. 5/4 1st & 2nds Basswood
100,000 ft. 5/4 No. 1 Common Basswood
200,000 Feet
5/4 No. 2 Common and Better Beech

All of the above stock is nicely manu-
factured, being hand sawed, trimmed,
and well seasoned. We are prepared to
quote attractive prices for this mate-
rial for immediate shipment.

BAY CITY, MICH.



J. RAYNER VENEERED PANELS

ALL WOODS
SEND FOR STOCK LIST

MAHOGANY LUMBER

CARROLL AVE. AND SHELDON ST.
CHICAGO

Going up—Hardwood Timber

We have the following hardwood and pine timber for sale at prices that have not as yet been advanced with the rise in value on timber lands. For a short time we offer—

150,000,000 FEET HARDWOOD IN SOUTHEAST ARKANSAS — A SPLENDID OPPORTUNITY.

7,600,000 FEET OF HARDWOOD IN SOUTH-WEST ARKANSAS

We also have timber in British Columbia and on the Pacific Coast and Oregon.

For further particulars, address

John C. Spry

Room 1003 Harris Trust Bldg.,

Chicago, Illinois

Estabrook-Skeele Lumber Co.

MANUFACTURERS AND DEALERS IN

Maple, Birch, Elm, Basswood, Ash
And Other Northern Hardwoods

In the Market for Round Lots of Hardwood

WRITE US BEFORE SELLING

Fisher Building, . . . CHICAGO

'PHONE HARRISON 1984



A floor to adore

For thirty-three years Wilce's Hardwood Flooring has been among the foremost on the market and because it stands today "unequaled" is the best evidence that its manufacturer has kept abreast of modern methods and the advanced demands of the trade. To convince yourself of the above statements, try our polished surface flooring, tongued and grooved, hollow backed, with matched ends and holes for blind nailing—you'll find it reduces the expense of laying and polishing.

Our Booklet tells all about Hardwood Flooring and how to care for it—also prices—and is free.

The T. Wilce Company

22nd and Throop Sts. CHICAGO, ILL.

SAVE YOUR MONEY BY USING THE

RED BOOK

Published Semi-annually
in February and August

It contains a carefully prepared list of the buyers of lumber in car lots, both among the dealers and manufacturers.

The book indicates their financial standing and manner of meeting obligations. Covers the United States, Alberta, Manitoba and Saskatchewan. The trade recognizes this book as the authority on the lines it covers.

A well organized Collection Department is also operated and the same is open to you. Write for terms.

Lumbermen's Credit Assn.,

ESTABLISHED
1878

608 So. Dearborn St.
CHICAGO

Mention This Paper.

116 Nassau Street
NEW YORK CITY

"WE ARE GETTING RESULTS"

WRITES ONE ADVERTISER

This Means That He Is Getting

NEW BUSINESS

Through His Ad

If we can do it for him is there any logical reason why we can't for you?

MAKE US PROVE IT

HARDWOOD RECORD, CHICAGO

Welcome to Our City

When you are buying your ticket for a trip into the hardwood country, don't forget to tell the man to make Louisville, Ky., your destination. It's unnecessary to arrange merely for stop-over privileges, for the reason that when you get here we'll make things so interesting for you that it will be unnecessary to proceed further.

You know all about the traditional Kentucky welcome, of course, and it's taken for granted that you realize that this is still on tap, ready for wanderers like yourself who don't have a chance to enjoy life in God's country very often. But we've got more than a mere welcome; what is more to the point, we've got the goods.

In these piping times of good business, with everybody in the market for something or other, and a lot of items as hard to find as the storied needle in the hay-stack, the advantages of trading in a market like Louisville are even more apparent than at other times.

That is to say, you can get quartered oak, and plain oak, and poplar, and ash, and hickory, and mahogany, and veneers, and panels, and about everything there is to be had in the hardwood line, right here; it's a good deal like going into a department store and buying a refrigerator in the basement, a diamond ring on the first floor, a suit of clothes on the second and a dinner on the roof. Anything you may happen to want is here. If you don't see it, ask for it.

We'll be looking for you.

The Louisville Hardwood Club

EDWARD L. DAVIS LUMBER CO.
LOUISVILLE POINT LUMBER CO.
W. P. BROWN & SONS LUMBER CO.
NORMAN LUMBER CO.

OHIO RIVER SAWMILL CO.
BOOKER-CECIL CO.
THE LOUISVILLE VENEER MILLS
C. C. MENGEL & BRO. CO.

KNOXVILLE

Famous for Finest Type of Poplar, Oak and Chestnut

VESTAL LUMBER AND MANUFACTURING CO. KNOXVILLE, TENNESSEE.

QUARTERED WHITE OAK OUR SPECIALTY

MANUFACTURERS OF
QUARTERED WHITE OAK, PLAIN OAK, POPLAR, WALNUT & TENNESSEE RED CEDAR LUMBER
BAND MILLS AT VESTAL, A SUBURB OF KNOXVILLE. SOUTHERN AND LOUISVILLE & NASHVILLE RAILROAD

H. S. MIZNER,
Pres.

C. C. CANNON,
Vice-Pres.

J. M. LOGAN,
Gen'l Manager

C. B. SWANN,
Sec'y and Treas.

J. M. LOGAN LUMBER CO.

MANUFACTURERS AND WHOLESALERS
HARDWOODS AND PINE
POPLAR A SPECIALTY

Main Office and Yards: Knoxville

Branch Office and Yard:

Bank and McLean Ave., Cincinnati I. M. ASHER, Mgr.

We Want Orders for the following Dry Stock:
WHITE OAK—Plain or Quartered.

RED OAK—Plain or Quartered.

CHESTNUT

BASSWOOD

POPLAR

WHITE PINE

Always carry large well
assorted stock of all
kinds of Hardwoods.

CAN SHIP ON SHORT NOTICE.

Maphet & Shea Lumber Co. Manufacturers and Wholesalers

OFFICE: 703-705 HENSON BUILDING

Yard: Middlebrook Pike and
Lonsdale Car Line

KNOXVILLE, TENN.

WE WANT TO MOVE

3 cars 4/4 No. 1 Common Poplar, 7" & up
2 cars 4/4 Clear Sap Poplar, 7" & up
1 car 4/4 Select Poplar, 7" & up
1 car 4/4 1 & 2 Red Oak, 10" & up
1 car 4/4 1 & 2 Chestnut
1 car 4/4 No. 1 Common Chestnut

We manufacture: YELLOW POPLAR,
OAK, CHESTNUT, WHITE AND YEL-
LOW PINE, HEMLOCK BARK, ETC.

BAND AND CIRCULAR MILLS—EAST TENN.
MOUNTAIN VIRGIN HARDWOOD STUMPAGE

Kimball & Kopcke Knoxville, Tennessee

Manufacturers and Shippers of
Appalachian Hardwoods
OAK OUR SPECIALTY

"THE VERY BEST" Red Birch

Knoxville Veneer Co.

P. B. RAYMOND, General Manager, Knoxville, Tenn.



CHARLESTON, W. VA.

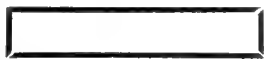
2 cars 6/4" Common & Better
Chestnut.

2 cars 4/4" 1sts & 2nds Cypress.

5 cars 4/4" 1sts & 2nds Red Gum.

5 cars 4/4" No. 1 Common Red Gum.

5 cars 4/4" 1sts & 2nds Sap Gum.



NASHVILLE



CELEBRATED FOR HIGHEST TYPE TIMBER GROWTH, FAULTLESS MANUFACTURE AND GOOD GRADES

Cherokee Lumber Co.

Manufacturers of all the lumber we sell.
Let us quote you some attractive prices
on quartered white oak and poplar.
Any grades and thicknesses.

NASHVILLE, TENN.

SECURE BETTER PRICES

AT LESS SELLING COST BY REACH-
ING MORE CUSTOMERS. HARDWOOD
RECORD PUTS YOU BEFORE THEM
ALL TWICE A MONTH.

ASK US ABOUT IT

We will name very attractive
prices on a few cars of each of the
following items:

4/4, 6/4, 10/4 and 12/4 1s and 2s Poplar.
4/4 and 8/4 Sap Poplar.
1 1/4", 1 1/2" and 2 1/4" No. 1 Common Poplar.
4/4 No. 1 and Panel Poplar in widths of 12 to 17", 18 to 23"
and 24" and up.
4/4 x 13 to 17" Poplar Box Boards.
4/4 1s & 2s Basswood or Linn—very fine.
3/8, 4/4, 5/4, 10/4 and 12/4 1s & 2s Qtd. W. Oak.
4/4, 5/4, 6/4 and 8/4 No. 1 Common Qtd. W. Oak.
6/4 1s & 2s Qtd. R. Oak.
4/4, 5/4 and 6/4 No. 1 Common Qtd. R. Oak.
6/4 and 10/4 1s & 2s Hickory.
4/4, 6/4, 10/4 and 12/4 No. 1 Common Hickory.
4/4, 6/4, 8/4, 10/4 and 12/4 No. 2 Common Hickory.
4/4 1s & 2s Chestnut, also 5, 6 and 8/4.
4/4 No. 1 Common Chestnut.

John B. Ransom & Co.

MANUFACTURERS OF

Hardwood Lumber

Nashville, Tenn.

LAMB-FISH LUMBER CO.



Band Mill and General Offices

CHARLESTON,

MISS.

**THE LARGEST HARDWOOD MILL IN THE WORLD
ANNUAL CAPACITY, 40,000,000**

STOCK LIST—Dry Lumber on Hand February 1, 1913

TELEGRAPH
CODES
UNIVERSAL
HARDWOOD
WESTERN UNION
Cable Address, Lamb

	3 8	1 2	5 8	3 4	4 4	5 4	6 4	8 4	10 4	12 4	16 4
FAS. Qtrd. White Oak.....	6,000	50,000	20,000	.....	.....	25,000	7,000	.....	.....	.....	.....
No. 1 Com. Q. W. Oak.....	.....	.....	.....	20,000	150,000	.....	.....	.....	.....	.....	.....
No. 2 Com. Q. W. Oak.....	.....	.....	.....	.....	15,000	.....	.....	.....	.....	.....	.....
FAS. Q. W. Oak, 10" and up.....	.....	.....	.....	.....	15,000	.....	.....	.....	.....	.....	.....
FAS. P. W. Oak.....	30,000	30,000	20,000	.....	.....	40,000	40,000	.....	3,000	.....	4,000
No. 1 Com. P. W. Oak.....	.....	.....	40,000	16,000	200,000	5,000	20,000	.....	9,000	.....	.....
FAS. P. W. Oak, 12" and up.....	.....	.....	.....	4,000	.....	.....	.....	.....	.....	.....	.....
FAS. P. R. Oak.....	.....	.....	30,000	.....	180,000	.....	.....	20,000	.....	.....	1,000
No. 1 Com. P. R. Oak.....	.....	.....	20,000	25,000	60,000	.....	18,000	1,000	.....	.....	.....
C. & B. Qtrd. Red Gum.....	.....	.....	.....	.....	50,000	5,000	.....	.....	.....	.....	.....
FAS. Circassian Red Gum.....	.....	.....	.....	15,000	15,000	2,000	3,000	1,000	.....	.....	.....
FAS. Red Gum, Plain.....	200,000	150,000	110,000	250,000	210,000	40,000	60,000	40,000	.....	3,000	.....
No. 1 Com. Red Gum, Plain.....	60,000	20,000	130,000	40,000	50,000	50,000	20,000	.....	.....	.....	.....
FAS. Sap Gum, 18" up.....	.....	.....	.....	.....	15,000	.....	.....	.....	.....	.....	.....
FAS. Sap Gum, 6" up.....	30,000	50,000	40,000	50,000	.....	15,000	20,000	15,000	.....	.....	.....
No. 1 Com. Sap Gum.....	.....	.....	25,000	30,000	250,000	.....	15,000	.....	.....	.....	.....
No. 2 Com. Gum.....	60,000	30,000	25,000	40,000	.....	220,000	15,000	.....	.....	.....	.....
S. & B. Cypress.....	.....	.....	.....	.....	45,000	.....	75,000	30,000	.....	.....	.....
C. & B. Tupelo.....	.....	.....	.....	.....	60,000	.....	.....	.....	.....	.....	.....
Log Run Elm.....	.....	.....	.....	.....	70,000	.....	.....	.....	.....	.....	.....

OUR LUMBER CONTAINS ALL WIDE STOCK PRODUCED IN MANUFACTURING AND WILL RUN OVER 50% OF 14 AND 16 FT. LENGTHS. WE ALSO MANUFACTURE OAK TIMBERS AND BRIDGE PLANK—FACILITIES FOR KILN DRYING AND DRESSING

"STEARNS" QUALITY LUDINGTON

HARDWOOD SPECIALISTS

We Specialize in

MIXED CARLOAD ORDERS

of

Maple, Beech, Birch, Basswood, Elm and Ash
and our specialty is

PROMPT SERVICE

Try us when you want it quick

The **STEARNS**
SALT & LUMBER CO. LUDINGTON, MICH.

BAND SAWN HARDWOODS

WE PRODUCE OUR OWN STOCKS

OAK—Plain and Quartered, Red and White

COTTONWOOD—Ash, Southern Elm, Gum, Soft Maple

A FEW ITEMS WE WANT TO MOVE:

100,000 Ft. 4 4" x 18" to 21" 1st & 2nds Cottonwood.

150,000 Ft. 4 4" x 9" to 12" Cottonwood Box Boards.

50,000 Ft. 5 4" x 13" to 17" 1st & 2nds Cottonwood.

75,000 Ft. 3 8" 1st & 2nds Red Gum.

41,000 Ft. 1 2" 1st & 2nds Red Gum.

44,000 Ft. 5 8" 1st & 2nds Red Gum.

86,000 Ft. 3 4" 1st & 2nds Red Gum.

110,000 Ft. 4 4" 1st & 2nds Red Gum.

120,000 Ft. 5 8" 1st & 2nds Sap Gum.

85,000 Ft. 3 4" 1st & 2nds Sap Gum.

WRITE US FOR PRICES

ANDERSON-TULLY COMPANY
HARDWOOD LUMBER **Memphis, Tenn.**

A Prominent Veneer Man says:

¶ "I believe your new service showing the exact requirements of the Veneer and Panel Trade to be highly accurate, and a necessary part of the office equipment of any progressive veneer or panel factory."

¶ The same information would cost you thousands of dollars. The cost of our service is a small fraction of that.

¶ Ask your competitor to tell you how it has helped him, and then write us for details.

HARDWOOD RECORD,

CHICAGO, ILL.

500 Copies Sold Within a Week After Prospectus Was Issued

Hardwood Record announces the issue on March 15, 1913, of an Authoritative Commercial and Scientific Book

American Forest Trees

By Henry H. Gibson, Editor Hardwood Record
Edited by Hu Maxwell, Wood Utilization Expert

The Work Involves:

First: A botanical description of the more than 300 species of American forest tree growth.

Second: A physical description of the wood of these species.

Third: A recital of the chief uses of all important American woods, together with suggestions of advantageously broadening their uses.

Fourth: Complete information concerning the range of growth of all varieties.

Fifth: Related trees are logically grouped according to families and spe-

cies; important species covered in substantial detail, and brief mention of the woods of minor importance.

Sixth: Scientific name of each tree is recited, as well as the various common names by which it is recognized in different parts of its range of growth.

Seventh: The properties of the various woods are carefully analyzed, particularly weight, hardness, stiffness, strength, elasticity, toughness, color, figure, and seasoning and lasting properties.

☐ The book will contain between 650 and 750 pages, will be printed on the best quality of enameled paper, and handsomely bound in half leather, dark green roan back and corners, with basket cloth sides, silk head-bands, gold stamping on the back, and gilt top.

☐ The work will be illustrated with more than 100 full-page pictures on plate paper in sepia, outlined in orange, from photographs, covering all the chief commercial varieties of virgin forest timber growing in the United States; and also with numerous engravings, from drawings and photographs, showing leaf and flower forms, etc.

☐ The price of the work is \$6.00, delivered by express or mail, and is sold only on subscription.

☐ An order blank, and a prospectus, showing the character of the paper, size of page and style of printing will be forwarded on application.

Address Book Department, HARDWOOD RECORD

537 South Dearborn Street

Chicago, Illinois

ORDERS SHOULD BE PLACED AT ONCE

CINCINNATI
THE GATEWAY OF THE SOUTH

**The Maley, Thompson
& Moffett Co.**

**Veneers, Mahogany and
Hardwood Lumber**

Largest Stocks Best Selections
CINCINNATI, OHIO

L. W. RADINA & CO.

DEALERS IN

**POPLAR AND
HARDWOODS**

CINCINNATI : : OHIO

BENNETT & WITTE

10 cars 4/4 No. 1 Common Plain Red Oak
5 cars 4/4 No. 1 Common Plain White Oak
5 cars 5/8 1sts and 2ds Sap Gum.
10 cars 3/4 1sts and 2ds Sap Gum
20 cars 4/4 1sts and 2ds Red Gum.
10 cars 4/4 No. 1 Common Red Gum.
1 car 3" Plain White Oak, 1sts and 2ds.

Main Office
CINCINNATI, OHIO

SOUTHERN OFFICE, MEMPHIS, TENN.
EXPORT OFFICE, NEW ORLEANS, LA.

89%

of HARDWOOD RECORD subscribers are owners of steam plants. Eighty-nine per cent are, therefore, buyers of wood-working machinery. There is little percentage of waste circulation in HARDWOOD RECORD for machinery advertisers.

W. E. HEYSER, President WEAVER HASS, V. President
BENJAMIN BRAMLAGE, Sec'y & Treas.

**The W. E. Heyser
Lumber Company**

MAIN OFFICE & YARDS
Winton Place
Cincinnati, Ohio

BRANCH YARDS AND MILLS
West Virginia, Mississippi, Arkansas & Kentucky

12,000,000 ft. High Shipments made
Grade West Vir direct from our
ginia and Southern own yards and
Hardwoods in mills in straight or
stock at all times. mixed cars.

SEND US YOUR INQUIRIES

The Mowbray & Robinson Co.

SPECIALISTS IN

OAK—ASH—POPLAR

ALWAYS IN THE MARKET FOR
ROUND LOTS OR MILL CUTS

OFFICE AND YARDS
SIXTH ST., BELOW HARRIET

CINCINNATI

WE WANT TO BUY

1", 1 1/4", 1 1/2" 1s & 2s AND NO. 1 COMMON SAP GUM
1", 1 1/2" & 2" 1s & 2s AND NO. 1 COMMON RED GUM
1" NO. 1 COMMON TUPELO.

SUBMIT US YOUR STOCK SHEETS
WITH BEST CASH PRICES

DUHLMEIER BROS.
CINCINNATI, OHIO

THE EAST

BOSTON

NEW YORK

PHILADELPHIA

WM. WHITMER & SONS
INCORPORATED

Manufacturers and Whole-
salers of All Kinds of

"If Anybody Can,
We Can"

HARDWOODS

West Virginia Spruce and Hemlock
Long and Short Leaf Pine Virginia Framing

Franklin Bank Bldg.

PHILADELPHIA

Willson Bros. Lumber Co.

MANUFACTURERS

WEST VIRGINIA HARDWOODS

Oliver Building

PITTSBURG, PA.

CHARLES HOLYOKE

141 MILK STREET, BOSTON, MASS.

HARDWOODS

WHITE OAK } 6x6 to 12x12
BILL TIMBERS } 10 to 20 ft.

ALSO BRIDGE PLANK

J. S. KENT COMPANY PHILADELPHIA

W. R. TAYLOR LUMBER CO.

Wholesalers and Manufacturers
CYPRESS, WHITE PINE, HARDWOODS AND HEMLOCK

1829 Land Title Building, PHILADELPHIA, PA.

PALMER & PARKER CO.

TEAK
ENGLISH OAK
CIRCASSIAN WALNUT

**MAHOGANY
VENEERS**

EBONY
DOMESTIC
HARDWOODS

103 Medford Street, Charlestown Dist.
BOSTON, MASS.

AMERICAN LUMBER & MFG. CO.
Manufacturers and Wholesalers PITTSBURGH, PA.

HARDWOOD White and Yellow Pine

We make a specialty of thick Railroad Car and Construction
White Ash, Hard Maple and Oak timbers, long lengths and
White Oak. special sizes.

Write for prices before heavy call for Spring requirements.

WISTAR, UNDERHILL & NIXON

REAL ESTATE TRUST BUILDING, PHILADELPHIA, PA.

QUARTERED WHITE OAK

NICE FLAKY STUFF

H. D. WIGGIN 89 STATE STREET
BOSTON, MASS.

MANUFACTURER HARDWOOD LUMBER

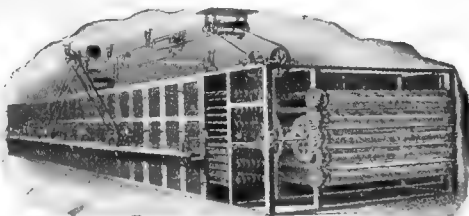
Circular-sawed Poplar, Oak, Chestnut, Basswood, Maple
Mill at Stone Coal Junction, West Virginia

We Know How to fill your orders for all kinds of HARD-
WOODS, WHITE PINE, YELLOW PINE,
SPRUCE, HEMLOCK, CYPRESS, HARDWOOD FLOORING.
Give us a trial.

THOMAS E. COALE LUMBER COMPANY
FRANKLIN BANK BUILDING, PHILADELPHIA, PA.

PROCTOR VENEER DRYER FIREPROOF
—AN—
UNPARALLELED SUCCESS

No
Splitting
Nor
Checking
No
Clogging
Nor
Adjusting



Recom-
mended by
all those
who
have tried
it

THE PHILADELPHIA TEXTILE MACHINERY COMPANY
DEPT. L HANCOCK & SOMERSET STS. PHILA, PA.

If You Knew

What our BULLETIN SERVICE was doing
for your competitor in the lumber business, you'd
not only want the service yourself, but YOU'D
HAVE IT.

Let Us Tell You About It.

Hardwood Record :: Chicago.

THE EAST

LEADING MANUFACTURERS AND JOBBERS

W. P. Craig Lumber Co.

Wholesale Hardwood and Building

Lumber

Empire Building, :: PITTSBURG, PA.

HARD MAPLE

When the quality of being hard is required in Maple, Vermont or Adirondack stock should be specified. Maple will not grow harder for us than other people, but it certainly does grow harder in this section of the country than elsewhere.

WE CAN MAKE PROMPT SHIPMENTS.

GEO. WEBSTER LUMBER CO.
21 Besse Place, Springfield, Mass.

For Quick Shipment 2 Cars 4/4 No. 1 Common and Better Chestnut
1 Car 6/4 No. 1 Common and Better Chestnut
1 Car 8/4 No. 1 Common and Better Chestnut
3 Cars 5/4 Sound Wormy Chestnut

Inquiries Promptly Answered

DANIEL B. CURLL, REAL ESTATE TRUST BLDG., PHILADELPHIA, PENNA.

Saw Mills Designed and Built

Plans and specifications prepared. Construction supervised. First class heavy millwright work. Entire plants surveyed. Machinery for complete mills. Fire loss adjustments. Practical sawmill engineer. Can save you money. Highest testimonials.

C. M. STEINMETZ, P. O. Box 83, Washington, D. C.

BEECHER & BARR

OAK CHESTNUT POPLAR

WHITE PINE, YELLOW PINE AND HEMLOCK
INTERIOR TRIM. HARDWOOD FLOORING.

442 LAND TITLE BLDG. PHILADELPHIA, PA.

J. & J. VINKE

Agents for the Sale of

AMERICAN HARDWOODS IN LUMBER AND LOGS
AMSTERDAM, HOLLAND

WM. E. LITCHFIELD

MASON BUILDING, BOSTON, MASS.

Specialist in Hardwoods

Manufacturers are requested to supply lists of stock for sale

JONES HARDWOOD COMPANY

33 Broad Street, Boston, Mass.

Birch, Maple and Beech

LET us talk to you about the plain and quartered oak that made Indiana famous. It's the kind we make to-day.

Wood-Mosaic Co., New Albany, Ind.

R.E. Wood Lumber Company

☞ Manufacturers of Yellow Poplar, Oak, Chestnut, Hemlock and White Pine.

☞ We own our own stumpage and operate our own mills.

☞ Correspondence solicited and inquiries promptly answered.

GENERAL OFFICES:
CONTINENTAL BUILDING.

Baltimore, Maryland

POPLAR

4 4 to 12/4, All Grades

We also manufacture Oak and Gum

If you appreciate quality and service,
we will hold your business

Faust Bros. Lumber Co.

SALES OFFICE:
CHICAGO, ILL.

MAIN OFFICE:
PADUCAH, KY.

CYPRESS LUMBER

1s and 2s: 5/4"....	21845	Selects: 8/4".....	2620
6/4"....	8000	Shop: 5/4".....	715
8/4"....	3220	6/4".....	13925
Tank: 8/4".....	8360	8/4".....	4340
Selects: 5/4".....	39320	Common: 5/4".....	142370
6/4".....	11500	6/4".....	50925

RUSSE & BURGESS, Inc.

Memphis, Tennessee

FIRE
INSURANCE

Lumber Underwriters

66 BROADWAY
NEW YORK

E. F. FERRY, Manager.

Table of Contents

COVER PICTURE:—Handling and Assorting Logs at Mill.	
REVIEW AND OUTLOOK:	
General Market Conditions.....	15
A Condition, Not a Theory.....	15
Preventive Appliances.....	15
Lumber Cost,—Present and Future.....	16
An Unreasonable Expectation.....	16
Fire Risk in Wooden Buildings.....	17
Milling-In-Transit Order Issued.....	17
Will Arbitrate Firemen's Strike?.....	18
Coming National Wholesalers' Meeting.....	18
Condition of Shipments in Fiber vs. Wooden Packages.....	18
Final Hearing on Car Weights.....	18
Fully Digested.....	18
CARTOON:—The Hardwood Situation.....	19
SPECIAL ARTICLES:	
Hardwoods of the Pacific Slope.....	20
Traffic Matters Around Memphis.....	22
Introducing New Woods.....	22
Handling and Assorting Logs at Mill.....	23
Lumbering in the Bahamas.....	23
The Truth About Catalpa.....	24
Co-Operation and Sales Efficiency.....	25
Car Conditions February 15.....	26
In the Lair of the Eucalypts.....	27
A Point to Remember In Selling by Width.....	28
Climatic Changes Recorded by Trees.....	29
Kraetzer-Cured Lumber.....	30
German East African Cedar.....	31
Low-Grade Hardwoods on a Bull Market.....	32
An Analysis of Wood Values.....	33
The Lumber Trade Journal.....	35
Conditions Abroad During January.....	36
Impressions of a Tenderfoot.....	37
Meeting of Box Manufacturers.....	39
THE MAIL BAG.....	40
NEWS MISCELLANY.....	41-45
HARDWOOD NEWS NOTES.....	45-49
HARDWOOD MARKET.....	50-53

SUBSCRIPTION TERMS: In the United States and its possessions, and Canada, \$2.00 the year; in foreign countries, \$1.00 extra postage.
In conformity with the rules of the postoffice department, subscriptions are payable in advance, and in default of written orders to the contrary, are continued at our option.
Instructions for renewal, discontinuance, or change of address, should be sent one week before the date they are to go into effect. Both old and new addresses must be given.
Both display and classified advertising rates furnished upon application. Advertising copy must be received five days in advance of publication dates.
Entered as second-class matter May 26, 1902, at the postoffice at Chicago, Ill., under act of March 3, 1879.

OAK FLOORING

Kiln-
Dried
Polished



Hollow
Backed
and
Bundled

ICHABOD T. WILLIAMS & SONS

**Foreign and Domestic Woods
In Logs, Lumber and Veneers**

11th Ave. and 25th Street
NEW YORK

910 So. Michigan Avenue
CHICAGO



Hardwood Record

Published in the Interest of the American Hardwood Forests, the Products thereof, and Logging, Saw Mill and Wood-Working Machinery, on the 10th and 25th of each Month, by

THE HARDWOOD COMPANY

Henry H. Gibson, Editor and Manager
Edwin W. Meeker } Associate Editors
Hu Maxwell }

Entire Seventh Floor Ellsworth Building
537 So. Dearborn Street, CHICAGO
Telephones: Harrison 8086-8087-8088



Vol. XXXV

CHICAGO, FEBRUARY 25, 1913

No. 9



Review and Outlook



General Market Conditions

CONTINUED POOR LOGGING WEATHER in the South, fair logging conditions in the North, and uninterrupted demand with steadily increasing prices in a good many items of hardwood mark the general situation at this date. There has been some disposition noted on the part of the buying trade to withhold large contract orders in anticipation of a general break in price; but it is safe to predict that their expectations in this particular will not be fulfilled. This disposition, while reported from a number of centers, is not prevalent and does not mark the view which any considerable percentage of buyers take of the present market. It is impossible to see any radical change in conditions for months ahead. Northern mills will certainly not manufacture any more actively than they are doing at present and the wretched weather in the South has been a serious factor with the millmen. It is a perfectly safe prediction that a gradually stimulated and uninterrupted demand will mark the coming year. All consuming factories are now actively in the market. The factory trade is as a whole calling for considerable quantities of lumber in anticipation of spring activities. This demand is not going to decrease, but will, for the most part, very likely increase as but a small percentage of consumers have been able to completely replenish their depleted stocks. The railroads are actively in the field again and decisions are noted on the part of the directorates of various important systems which will provide for considerable expansion and repair work. Quite a number of unusually large car orders, in which are included a great many cars of wooden superstructure, have been placed during the last few weeks.

The situation confronting the consumers of box lumber continues about as it has been, with probably a slightly increased level of prices on such material. The box trade is taking all it can get of low-grade lumber and seems to be taking the situation philosophically, realizing the futility of endeavoring to lower the price of such material with the present active demand for it from many sources outside of box manufacture.

Oak, of course, is still king; but, judging from the reports from different hardwood centers, ash is pushing it pretty closely; in fact, the demand for ash is surprisingly active. In oak, plain-sawed stock is, as for some time past, strongest, although continued increase in call for quartered oak is noted everywhere; in fact, the demand of late has been so active that some quarters report scarcity of dry stock. It is difficult to find a standard American hardwood right now which is what could be called long on the market.

With the spring months coming on and the consequent opening up of building operations all over the country entailing the consumption of vast amounts of construction and finish lumber, and later large

amounts of lumber going into the house finishings and furniture, it is impossible to perceive just how the situation can be materially altered.

A Condition, Not a Theory

THE CARTOON IN THIS ISSUE of HARDWOOD RECORD aptly depicts the hardwood situation. The demand for hardwoods is far in the lead of the supply, and far in advance of any possibility of the supply catching up with the demand for at least some months. No matter what the ambition of lumber manufacturers may be to materially increase their output at the present time, and during the coming spring, it is impossible for them to do so either by reason of a paucity of timber supply tributary to their mills, or by reason of such bad weather conditions as to render increased logging impossible. Logging conditions in the north-country have been far from favorable during the winter, and while many manufacturers anticipated being able to increase their output, in very few instances have they done so.

In the Mississippi valley hardwood district high water and bad weather have seriously militated against even a normal log output, and when logs were actually ready for shipment the railroads were unable to supply cars or handle them to even nearby mills. Perhaps the best logging situation that has prevailed in any part of the country during the winter has been in the mountain regions of the East. Weather conditions have been fairly favorable and a very good stock of logs has been obtained, and such as were rafted have come out to the mills in very fair volume.

On the whole, however, the visible supply of logs back of hardwood mills at present is very small, and there is no reason to believe that the supply of dry lumber will equal the demand for a good while to come. Hence buyers who are holding off making purchases with the hope that there will be a decline in the lumber market are figuring on an untenable basis. It is thoroughly believable that the price of some hardwoods will materially advance in the near future, and that there is scarcely an item that will show a decline between now and mid-summer.

Preventive Appliances

THE NATIONAL ASSOCIATION OF MANUFACTURERS has issued as a supplement to "American Industries" published by that association a four-page insert devoted to the illustration of practical safety devices typifying in concrete form the work of the National Association of Manufacturers. This pamphlet as far as it is read should enable manufacturers, superintendents, foremen and workers to appreciate that one phase of safety engineering consists of a mixture of common-sense and mechanical ability and

also that without the fullest co-operation on the part of the workman himself the fullest purpose of the accident prevention is defeated. The insert is the first of a proposed series of similar inserts, each one of which will deal with a particular danger and will describe and illustrate specific means by which such points of danger can be covered in a practical manner.

What has been needed in the matter of accident prevention has been less agitation and more uniformity of methods. This endeavor on the part of the National Association of Manufacturers is surely one which will eventually result in considerably simplifying preventive devices and will ultimately effect uniformity in methods and in appliances for the purpose of guarding various dangerous machine parts. The inserts will be contained in each issue of "American Industries" published once a month and will ultimately effect a vast amount of good if every employer of labor operating an industrial plant will secure the supplement and follow the suggestions contained.

Lumber Cost—Present and Future

SOMEHOW A NOTION PREVAILS pretty widely that the price of lumber in this country is in some way controlled by a combine, a trust, a monopoly, or something of the sort; that if the people could get round some obstacle—the exact nature of which nobody appears to be able to define or describe—lumber could be bought for less money. Persons well informed in the timber trade and lumber business know better, but too many people have never inquired into the matter, and accept groundless suspicions as facts.

There is no general combination to enhance the price of lumber to the consumers. If there were, the evidence of it would exist in the price. Lumber at the present time in this country is one of the cheapest commodities consumed by the people. It is cheap in comparison with prevailing prices of other necessities. Almost everything else costs more in comparison with former prices. Other commodities have gone up much faster than lumber has. There is as much genuine competition among the manufacturers of lumber as among the growers of potatoes, corn, and cattle, or the manufacturers of clothing, shoes, hats, and furniture.

The latest census statistics show there are 31,934 active sawmills in the United States, and this does not include mills which cut less than 50,000 feet a year. There are probably over 15,000 of these little mills. The total for the whole country doubtless exceeds 45,000 sawmills, large and small. They are located everywhere, except in the absolutely treeless region. Every mill that is cutting lumber is trying to sell it, and is bound to sell it in order to keep going. The lumber is not thrown into a great pool, where somebody fixes the price and sells at that price; but competition governs, and the competition is as genuine and as general as that found anywhere else. The result is that Americans buy their lumber as cheaply as any people, and much more cheaply than most people are able to buy.

Not only is lumber cheaper here than in most other civilized countries, but it is cheaper now than it will ever be again. The reason for the present cheapness is not far to seek. The timber which the mills are now harvesting was planted and matured by nature during the past hundreds of years, without the help of man, and at no cost to man. Nature, with unprecedented generosity, gave this timber to the present generation as a free gift, and the present generation is now engaged in reaping the harvest which it did not sow.

This timber planted by nature will not last forever. Most of it has been cut and the remaining areas are going year by year to the mills. What will happen when it is gone? Prices will advance as supply decreases. Up to the present time there has been no real timber scarcity, though some kinds are becoming depleted. When one kind has been depleted or largely reduced, a substitute species has been found. That has kept prices down; but the process of finding substitutes cannot continue indefinitely. No additional sources of lumber remain to be discovered in this

country. All is in sight, and mills are at work on practically all of it.

When timber planted by nature has become reduced to a low point, and supplies become dependent upon the products of private forestry, there will be an advance in lumber cost which will make present day prices look very small. That time is not yet here, but it is coming. It is not necessary to cross the bridge before it is reached, but it is well enough to look ahead when a disposition to complain of present day lumber cost is felt. When the private woodlot becomes the chief source of lumber, timber cannot be bought for two, three, or five dollars a thousand, but stumpage alone will then cost about as much as lumber retails for at present.

Some who look forward to the time when timber scarcity will cause prices to advance sharply, expect the timber on government land to save the day—provided the state's rights movement does not succeed in getting the timber away from the government before that time. It is well enough to count on government timber to help, but it should not be blindly depended upon to keep prices down. In the first place, there is not enough of it—only one-fifth of the whole supply at present, and in the second place, it is not the government's policy, and it never should be its policy, to break an honest market by underselling. All that should be expected of it is, to help supply the people with lumber at prices fixed by the law of supply and demand.

The nub of the matter is that present prices of lumber are low in comparison with other commodities; that they are fixed by keen and general competition; and that a forecast of the future, in so far as facts warrant, indicates that much higher prices than the present are bound to come.

An Unreasonable Expectation

WITH ALL DUE RECOGNITION of the important part the box trade has held in the marketing of low-grade lumber, it is hard to recognize in certain suggestions emanating from well-known individuals connected with the manufacture of boxes, the logic which would win from the lumber trade the attention desired. It is manifestly an absurdity to ask the vendor of any commodity to voluntarily dispose of his goods at less than prevailing prices and, in view of the unfavorable position which low-grade lumber of all kinds occupied for a long time, any suggestion that a less than present market price be asked for such stock has, to say the least, a very meagre chance of even being considered seriously.

While it is recognized that such an expectation must be based on sincere motives, still it is undoubtedly the result of a wrong interpretation of the conditions governing the low-grade market. In the first place, the present satisfactory prices are the result not of any concerted effort on the part of the lumber trade, but are rather the result of the working of the time-honored law of supply and demand. The talk of scarcity of low grades is not idle and meaningless babble, but describes an actual condition. The consumers of low grades have made present prices possible, not the producers. A striking proof of the validity of this assertion is shown in an experimental arrangement recently effected at a northern pine shipping point. It was agreed that none of the firms involved would in any case quote a price on low grades, but would rather let the inquirer name his figure. There is evidence to prove that this suggestion was closely followed and yet the price of low-grade pine in that city advanced with astonishing rapidity.

The second point of which the box trade has a wrong conception is as to the relative importance of the box trade as a low-grade market, particularly for hardwoods. It is true, of course, that a vast amount of low-grade lumber has been and always will be used in box manufacture, but if the box man believes that the present shortage of low-grade hardwoods is due alone to increased demand from the box trade, he should be disillusioned. As a matter of fact, lower grades in all hardwoods are meeting with increased favor and, with a broadened market and closer

utilization and considerable quantities of such stock going into ties, there is every reason to believe that as the years go by, lumber manufacturers will be increasingly less dependent upon the box trade for an outlet for the poorer products of their mills.

It is a worthy suggestion advanced by the box men that fibre containers will gain in favor with increasing prices of wooden containers. It must be conceded, however, that any change from old methods is merely a mark of progress and that if a fibre container demonstrates its superiority for carrying a commodity of a certain character, its use in packing that commodity will follow regardless of any price question and in spite of any efforts to combat it. It is equally manifest that the number of places where the fibre container can be used to better advantage than the wooden container is exceedingly limited and with fair treatment in rate classification the problem will eventually solve itself. It is not to be supposed that any shipper will continue to use fibre containers after they have been tried and found wanting. While it is easy to counsel "patience," still that advice seems the most pertinent. After a thorough comparative trying out of the different classes of containers, it stands to reason that the eventual adjustment will be along lines of actual utility and in keeping with industrial progress.

Low-grade lumber is scarce and will probably never be as plentiful as it was. It is estimated by one competent to judge that Wisconsin and Minnesota together contain only 5,000,000 feet of No. 4 and No. 5 pine lumber unsold and that 6,000,000 feet is the total of unsold low-grade hardwoods in Michigan. With similar conditions prevailing with other woods, it is apparent that the box men are endeavoring to crack the wrong nut.

Higher prices for boxes, not lower prices for lumber are what they should seek. The latter condition is impossible of accomplishment while the former is a concrete possibility for, as before stated, utility and not price is, in the long run, what governs the shipper in his selection of a container.

Fire Risk in Wooden Buildings

IN ACCOUNTING FOR THE GREAT LOSS BY FIRE in towns and cities of this country, wood receives a great deal of blame which does not belong to it. Of course, wood will burn, and in nearly all fires where any considerable loss occurs, wood helps feed the flames; but the point that calls for comment is that statistics show the principal losses from fire are not among the wooden buildings, but in business sections where most of the structures contain comparatively little wood, and are supposed to be partly or wholly fireproof. Some alarm has been expressed on account of what seems to be a great and abnormal increase in fire loss. Various reasons have been suggested for it, and one that is most generally put forward is the wooden building. That has sounded so reasonable that many have accepted it without taking the trouble to inquire whether the conclusion is justified by the facts.

It is clearly not justified, according to the best information. The greatest losses do not occur where wooden structures are most abundant, but where they are fewest. The frame houses in residence sections of cities and towns, and the wooden barns, residences, and school houses in the country are not the places where fires originate as a general thing; but, rather, the fire that causes the damage usually has its origin in business places, and it is of comparatively rare occurrence that wood is the cause of the start

or the fire that causes the damage usually has its origin in business places, and it is of comparatively rare occurrence that wood is the cause of the start for heavy loss.

It is well known that in nearly all costly fires it is the contents of building rather than the material of construction which give momentum to the fire and cause the loss. Where the building has been properly done, and intelligent precaution is taken to lessen danger, wooden buildings stand about as long as those of any other material. It would be bad policy, of course, to construct city blocks of wood, because a fire in such a place would be likely to get beyond control, but within reasonable limits and in its proper places, the wood of building is not a menace.

Milling-in-Transit Order Issued

ON FEBRUARY 17 THE INTERSTATE COMMERCE COMMISSION issued at Washington its final opinion and order regarding milling-in-transit regulations. The order instructs the railroads that they are at liberty to proceed to draw their own rates, regulations and tariffs on milling-in-transit business, but that they must keep such rules strictly within the law.

The opinion included draft of a rule adopted at the shippers' conference which would act as a substitute for rule No. 76, but said:

"Upon careful consideration of the whole matter, it is our opinion that we should accede to the request that rule No. 76 be cancelled, but, on the whole, we do not think it would be wise, even if within our province, to publish as a ruling of the commission such requirements as have been proposed. It is our best judgment that the policy of not making orders and drawing rules or expressing views as to what would or would not under certain conditions be considered a violation of the law as to transit privileges be not departed from by

us, as the carriers are charged with the duties of initiating their rates, regulations and practices under their own responsibilities and liabilities imposed upon them by the act, subject to the appropriate action by the commission or the courts in the event they are found in violation of the law."

The statement by the commission also provides that if at any time shippers feel that milling-in-transit rates are discriminatory or in any way unjust or unreasonable or if the commission itself deems such conditions to be not entirely satisfactory, a new investigation on the subject will be instituted.

The rule cited by the commission as submitted by the shippers' conference says:

When rules and regulations have been established in tariff form clearly defining the purpose or purposes for and the terms under which the transit privileges are granted, and providing also for the effective policing of the operations, under the arrangement a shipment may be stopped in transit and the same shipment or a proper equivalent (less invisible loss in weight), as set forth in said rules and regulations may be forwarded by the through rate provided for by tariff from the original point of shipment to final destination, plus the charge for transit privilege, if any. This rule shall not be construed to authorize the publication of tariffs providing for the substitution of one commodity for a commodity of a different kind; that is to say, oats or the products of oats for corn or the products of corn, or shingles for lumber.

It was further stated in the opinion that one of the main reasons for setting aside milling-in-transit privileges was the fact that such privileges have been very much misused and that milling-in-transit rates had not always been what they purported to be. The railroads have also, according to the opinion, stated definitely that they are able and willing to promulgate and enforce proper rules and regulations governing the milling-in-transit privilege question.

UNSOLICITED TESTIMONIAL

Minneapolis, Minn.,
January 13, 1913.

Hardwood Record,
Chicago, Ill.

My Dear Mr. Gibson:

Your January 10th issue came in this morning and I am impelled to drop you this line to say how much it pleases me. It certainly is a dandy! You are to be congratulated and I am happy in adding my word to the many you should and doubtless will receive—all in the same vein.

May the year 1913, so auspiciously begun, prove as pleasing and satisfactory financially as Hardwood Record is typographically.

Yours very cordially,

FRANK W. TUTTLE,
Northwestern Lumbermen's Association.

Further reason for the issuing of the new order, according to the opinion, is for the purpose of establishing in the minds of railroads and of shippers taking advantage of the milling-in-transit privileges, the proper relation of tariffs and practices to the law. It stated that tariffs named their privileges in such a manner as to compel their real application and careful inspection showed that rates were not being enforced in accordance with the published tariffs at milling points.

The report pointed out that as a result of the investigations and previous orders, the atmosphere has been cleared and conditions understood and recognized more completely.

The newly issued order closes the case which has been before the commission and commanded a great part of its time during the past year.

Will Arbitrate Firemen's Strike Question

THE SUCCESSFUL CULMINATION of the efforts to refer to arbitration the differences between the various railroads east of the Mississippi and the firemen employed on their lines at least postpones for a considerable period the hardship which would be experienced by the shipping and traveling public due to the threatened general strike of the firemen's organization. The disputes have been referred to arbitration under the Erdman act, which provides that each factor in the controversy shall appoint a representative. These two men shall get together in an effort to arrive at a common ground of settlement. In the event of their inability to arrive at any satisfactory arrangement, they shall call in a third neutral party upon whom will rest the responsibility for the ultimate settlement.

While there is more or less satisfaction in the immediate postponement of the difficulty, the reference to the provision for compromise under the Erdman act calls attention to the inadequacy of at least one provision of that act providing for an arbitration committee of two or three. It is hardly reasonable to suppose that the two representatives can alone arrive at a satisfactory arrangement, and hence it can usually be expected under such conditions that the full responsibility of the solution of the problem will rest upon the third party. The enormity of this responsibility is hard to comprehend, but some understanding of it can be obtained from the statement of the fact that the demands on the part of the firemen apply to fifty-four roads, and would affect millions of people throughout the country. The immediate effect upon commerce and industry, and hence general business conditions, is fairly incomprehensible. The act which provides that such responsibility shall be shouldered by one man is manifestly weak.

It is to be hoped that the question will be settled amicably, but it is further to be hoped that time will see a change in the present provision for arbitration. However, the main thing is the fact that the strike has been averted, and that this menace will not lend its support to the natural conditions constantly operating as a hazard to the forward march of business prosperity.

Coming National Wholesalers' Meeting

THE SELECTION OF ATLANTIC CITY as the meeting place for the annual meeting of the National Wholesale Lumber Dealers' Association March 6 and 7, as noted more in detail in another part of this issue, is certainly a bit of wise policy on the part of the trustees of the association. This is the first time that the national wholesalers have ever held an annual meeting at Atlantic City. In view of the fact that these meetings have always been marked by strong social features, and further considering that New Jersey's popular resort is now in the height of its active season, the decision should result in an attendance unprecedented in the history of the association.

It has been suggested that the officers and secretaries of the twenty-five affiliated associations invited to the meeting remain over on March 8 for a general and informal discussion of lumber problems. It is hoped that if such a plan goes through the discussions will result in the acquisition of a great deal of useful information by the various officers and secretaries in attendance. It is

planned to talk over such topics as the "Necessity of National Lumber Associations," "Functions of State Retail Associations," "The Free Interchange of Business Information," "The Desirability of Uniform State Laws," etc.

Condition of Shipments in Fiber vs. Wooden Packages

WITH A VIEW OF ASCERTAINING the adaptability of the wooden and fiber container for freight shipments, the Santa Fe Railroad has instituted a careful and comprehensive investigation of this question by means of a record covering a ten-day period in January. A record was kept and compiled in the general freight offices of the Santa Fe System, and showed the condition of every package of freight handled packed in either the fiber or the wooden container. The result showed a total of 91,899 packages handled contained in wooden packages. Of these 1,029 or 1.12 per cent were in bad condition. On the other hand, 11,080 parcels of goods packed in pulp or fiber packages were shipped, and of these 4,723 or 42.62 per cent were in bad order.

This should prove an overwhelming argument in favor of a just classification as applied to goods packed in fiber vs. those packed in wooden containers. These statistics cover both outbound and inbound shipments in both classes of packages.

In the wooden packages the outbound shipments show 1.29 per cent to be in bad condition, and the inbound shipments had .73 per cent damaged goods. From this it can be seen that, generally speaking, the damage to goods packed in wooden containers is not the fault of the container, but rather of faulty packing. On the other hand, consider the same figures as applied to the fiber container. Outbound shipments showed damage to the extent of 23.88 per cent of the total number, while inbound shipments showed 80.70 per cent damage. Considering that the inbound shipment has traveled farther than the outbound shipment, it is a reasonable supposition that the damage resulted not from poor packing, but rather from the inadequate character of the material of the container to meet the demands placed upon it by long shipment.

Final Hearing on Car Weights

ON WEDNESDAY, FEBRUARY 26, the Interstate Commerce Commission will hold in Chicago what is expected to be the last of a long series of hearings on weighing practices by railroads. Ward Prouty, examiner of the commission, will preside and the government will be represented by John C. Marshand.

This will be the concluding hearing of a series that have embraced proceedings at Boston, New York, Pittsburgh, St. Louis, Salt Lake City and San Francisco. Thousands of pages of testimony are embraced in the records. Shippers contend that railroads have pursued faulty practices in weighing cars and that many injustices have resulted. The testimony so far submitted would certainly tend to prove the genuineness of such contention.

The commission is seeking to formulate a rule which will be fair to both shippers and carriers. No matter what the final ruling is, it will insure the inauguration of rules and regulations that will at least put the car weighing practices of the railroads on a more just basis in so far as the interests of the shippers are concerned.

Fully Digested

THIS OFFICE is in receipt of a very brief communication from the Fireproof Digest—that was—of New York, an alleged magazine presuming to exploit fireproof construction, and various materials entering into this type of building.

The communication referred to reads:

"The publication of Fireproof Digest has been discontinued."

Sad to relate the letter does not advise whether the production of stovepipe steel hollow doors, stuffed with cork shavings has been discontinued or not, but as this was the house organ of that enterprise, it is to be hoped such is the case.

Sheet steel doors when exploited as fireproof are in the same class with steel furniture and other like plunder that has been foisted on the public under false pretenses for some years.



Pert, Pertinent and Impertinent



HARDWOOD SITUATION



A Stern Chase Is a Long Chase

Poor George

Maude—George and I have decided to form a life partnership.

Clara—That's nice. Where does George come in?

Maude—Oh, he's to be a silent partner and put up the money.

Got Rid of It Somehow

Conceited Actor—"Yes, I inherited my talent."

Candid Friend—"I see. And you dissipated your inheritance."—*Boston Evening Transcript.*

The Raw Truth

Hungry Caller—James, what time is dinner?
Candid Butler—I 'as my horders, sir, which is to serve hup as soon as ever you go, sir.

Was the Real Thing

Mrs. Gnaggs—"I'll never forget the night you proposed to me. You acted like a perfect fool."

Mr. Gnaggs—"That wasn't acting."—*Philadelphia Record.*

Life is like a game of cards. "A good deal depends upon a good deal."

A Pretty Girl

"Pretty? Well, I should say!"

"But they have no family tree."

"Do you think of the tree when you see a peach?"—*Louisville Courier-Journal.*

More Profitable

Ole Scrabbler—"I hear you have given up fiction writing."

Young Scribbler—"No; merely changed my style. I've become an advertisement writer."



Hardwoods of the Pacific Slope



Editor's Note

The pending opening of the Panama canal naturally raises the question as to what effect it will have on the hardwood business. *HARDWOOD RECORD* of February 10 contained an analysis of present hardwood consumption on the coast, showing the importance of imported and eastern species. The appended article describes the hardwoods growing in the Pacific states and analyzes the possibility of their more general utilization.

The kinds of hardwood species of the Pacific slope outnumber the conifers nearly two to one, or to be more exact, in the ratio of 94 to 53. This statement is of more interest to the botanist than to the lumberman, for the latter is concerned with timber and not with trees merely. In point of timber production the hardwoods of this region are comparatively insignificant and scarcely a single species can approach in importance any one of the commercial hardwoods of the East. Out of nearly a hundred species scarcely a dozen are of the slightest importance except locally for fuel.

In a region where everything is drawn to so large a scale one might expect to find mammoth hardwoods just as he does pines, hemlock, Douglas fir, spruces, firs and redwoods. But the very conditions which make the coniferous forests the richest in the world are evidently not conducive to the growth of hardwoods, and for the most part those that do exist are mere shrubs, as it were, proportionate in size to the softwood trees.

A glance through the list shows a total absence of any form of many of the trees so common in the East, for example, hickory, elm, chestnut, yellow poplar, red gum, basswood, tupelo, black locust, honey locust, mulberry, Osage orange, magnolia, buckeye, persimmon and catalpa. The oak has sixteen representatives, but even in a region where hardwoods are at a premium, they are of little account for their timber. The only broadleaf tree to attain good dimensions in sufficient quantity to be of much economic importance is the black cottonwood, the largest and best of our poplars.

Briefly summarizing the article referred to in the editor's note it is shown that the hardwoods at present used in the Pacific coast states come from many foreign markets, and only a very small proportion of them are local woods. From the eastern states are imported oak, ash, hickory, maple, cherry, basswood, black walnut, tulip poplar, birch and elm; from Honduras, mahogany; from Mexico, Mexican mahogany, prima vera, or jenizero; from Hawaii, koa; from Australia, iron bark (one of the eucalypts) and red bean; and from Japan, Japanese oak.

It is further shown that the hardwoods from the eastern states come for factory use in the rough or "club" form; for the vehicle industry as roughly finished parts, such as spokes, hubs, bent rims, and sawed felloes; and for cooperage as rough staves and heading.

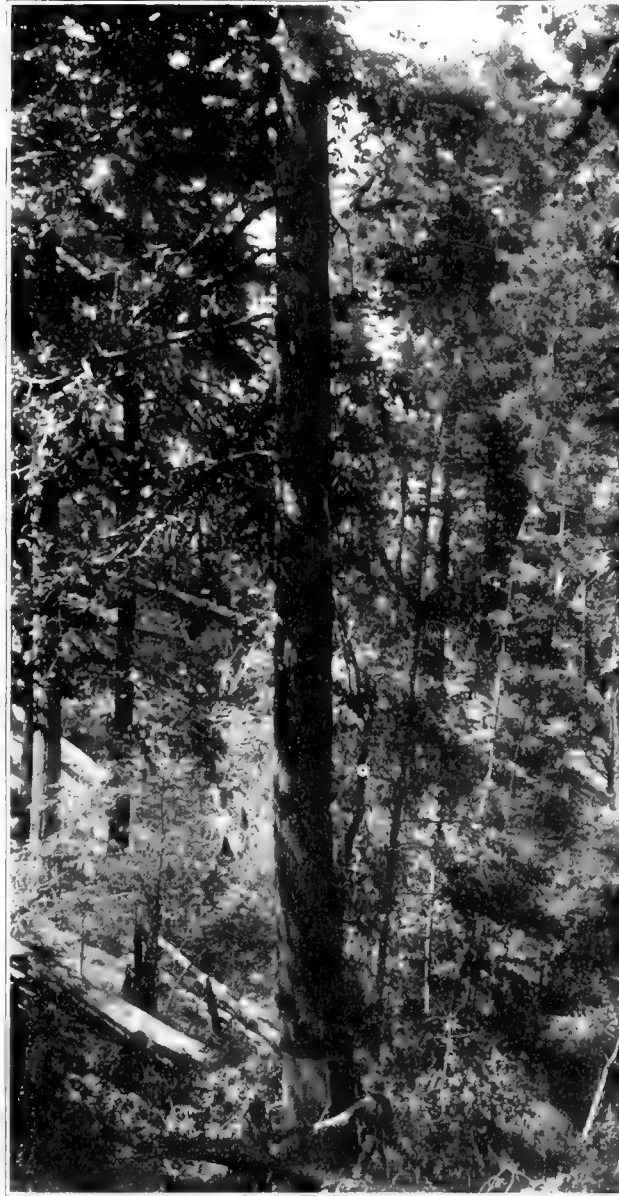
The rest are in the form of 1-inch and 2-inch boards and 3- to 6-inch planks from 6 to 16 inches wide and from 10 to 30 feet long. A small proportion comes in the form of squared timbers up to 20 by 20 inches by 24 feet long.

This is for special-order work. The Mexican, Australian, Hawaiian and Japanese woods generally come in the shape of roughly hewn timbers, the sizes ranging from 14 by 14 inches up to 36 by 36 inches and from 10 to 20 feet long. These rough timbers are sawed into veneer stock, board and planks, as wanted.

Black cottonwood (*Populus trichocarpa*) is found along the coast from southern Alaska to the San Bernardino mountains in southern California. It extends eastward along the Columbia river and is also found as far inland as western Montana. It is most abundant and of largest size in the lowlands in Oregon and Washington. It is the most valuable broadleaf species on the Pacific coast. It attains large dimensions, occasionally 5 or 6 feet in diameter and up to 150 feet high, though usually considerably less. It is nearly always straight, smooth and of excellent timber form.

The wood is of a dull grayish-brown color, soft, light, tough, of uniform and moderately fine texture, straight-grained, odorless and tasteless. The pores are small to minute, thin-walled, angular, those in the springwood usually visible to the unaided eye. The wood seasons without warping or twisting, a decided advantage over the eastern species. It nails readily without splitting, is easily glued, and works very smoothly and readily. Because of its softness, light color and long straight fiber it is especially adapted to pulp and excelsior manufacture. The lack of color in the wood and its cheapness, lightness, and facility in nailing, fit it well for box material. It is also employed to greater or less extent as drawer bottoms, shelving, cores for built-up panels, baskets, saddles, candy and coffee drums, candy pail covers, cooperage, trunks, caskets, pulleys, vehicles and fixtures.

The wood-using industries of Washington consume annually over 32½ million feet of black cottonwood. Of this amount 12 million feet goes into boxes; over 7½ million into pulp; a little less than 6½ million into excelsior; and 4½ million into veneer. Oregon's industries require 10½ million feet of this wood, 5½ million going into pulp and 4½ million into excelsior. California's industries consume annually a little over 5 million feet, of which half goes into woodenware and novelties and most of the remainder into boxes.



TYPICAL TANBARK OAK TREE SHOWING FIRST FOUR-FOOT RING BEING TAKEN OFF BEFORE FELLING. SHERWOOD, MENDOCINO COUNTY, CALIFORNIA.

Oregon ash (*Fraxinus oregona*) is the only timber ash of the Pacific region. It is found in the most part in the vicinity of streams on alluvial bottoms or flats from the shores of Puget Sound southward through Washington, Oregon and California. It reaches its best development in southwestern Oregon. In the northern part of its range it is usually in rather close stands of red alder, Oregon maple and California laurel; farther south it occurs with white alder and California sycamore. Forest grown trees have long, clear trunks and are from sixty to seventy-five feet high and from sixteen to thirty inches through, occasionally larger.

The wood is pale brown in color, quite hard and strong, rather light but tough and resilient. The sapwood is nearly white but with a slight reddish tinge. The wood looks like white ash but structurally is more like black ash. The dry material is subject to the attack of powder-post beetles, which often destroy its usefulness and limit its employment. It is used for many purposes, such as handles, furniture, interior work, fixtures, boats (finish and ribs), vehicles and saddles. About 446,000 board feet of the wood is consumed annually by the wood-using industries of Oregon, but only 58,000 feet in Washington.

Oregon maple (*Acer macrophyllum*), also known as bigleaf and broadleaf maple, is the only commercial representative of maple on the Pacific coast. It makes its best growth in Oregon and Washington coast regions, especially in alluvial river bottoms. Its botanical range extends from Alaska to southern California. It varies greatly in form and height in different soils and situations from a short-stemmed crooked tree from twenty-five to thirty feet high and under a foot in diameter to one from sixty to eighty feet high, with a long, straight, clear bole from fourteen to thirty inches through. It is one of the most important hardwoods in Oregon where about 2,500,000 board feet of the lumber are consumed annually in the wood-using industries. In Washington it is also important though only 300,000 feet are reported as used by the wood-using industries of that state.

The wood is, in structure, more like the soft than the hard maples but is fairly heavy, hard and strong, being intermediate of the two groups. The color is deeper and richer as a rule than in the other maples. The wood turns readily, takes a good polish, and wavy-grained forms which are common are especially desirable for imitation mahogany furniture. While it is principally employed for furniture it is also used for handles, interior work, fixtures, pulleys, saddles, musical instruments and firewood. It should be adapted to the same uses as eastern red maple, but because of its scattered occurrence and rather poor form, commercial quantities of clear, sound material of good sizes are difficult to obtain.

Red alder (*Alnus oregona*) is the only important alder in the United States, although fifteen different species are recognized by botanists. It is distinctly a tree of moist situations and grows chiefly along streams, near springs, in river bottoms and on particularly well-watered slopes. While its botanical range extends from southeastern Alaska to Los Angeles county, California, it reaches its best development in Washington and Oregon. Its usual size in these two states is from fifty to seventy-five feet high and from a foot to a foot and a half in diameter, sometimes much larger. In form it is usually straight, fairly cylindrical, and free of branches for at least twenty-five or thirty feet.

The color of the wood is light brown tinged with red. The wood is light, rather soft, fairly strong, brittle, fine-textured, works easily and takes an excellent polish. It turns and glues well and does not shrink or check badly. When finished it resembles cherry, making it a desirable cabinet wood. It is used also for broom handles, pack saddles, interior finish, pulleys, moldings, columns, piling and fuel. Although suited for other purposes the tree has little future, as it is an incidental species on soils which are either adapted to better forest trees or are suitable for agriculture.

Western chinquapin (*Castanopsis chrysophylla*) or as it is more commonly called simply "chinquapin" is one of two trees on the Pacific coast which are intermediate between chestnut and oak. This tree favors the chestnut mostly while the other, the tanbark oak, is mostly oak. Western chinquapin occurs on mountain

slopes, sheltered ravines and valleys, and in rather dry or very dry rocky and gravelly soils from southwestern Washington to southern California. It is largest in valleys in northwest California, being small or shrubby in dense pure-growth thickets over large areas elsewhere of its range. While sometimes a very large tree is found, ordinarily it is from thirty to fifty feet high and from eight to fifteen inches in diameter in the region best suited to it. It has thick, evergreen leaves, and bears a small bur like a chestnut.

The wood is pale reddish brown in color, light, rather soft, fine-textured, stiff but not strong, somewhat brittle, works easily. It is odorless and tasteless, though the tannin contained is somewhat astringent. Unlike chestnut the pores in the springwood of the growth rings are few, small, usually round or nearly so, and rather widely separated in a single row. There is little about the appearance or structure of the wood that resembles oak as all the rays are very fine and the pores small. The radial lines of pores in the summerwood and the presence of wood parenchyma in fine tangential lines is like both chestnut and oak. Large trees furnish excellent saw timber suitable for agricultural implements, certain grades of furniture, and miscellaneous purposes.

Tanbark oak (*Quercus densiflora* or *Pasania densiflora*) occurs from northern Oregon through the cascades and coast ranges and west slopes of the Sierras to the mountains of southern California. It reaches its greatest size and is most abundant in the redwood forests of California, though nowhere does it form more than a small part of the stand. The average size of mature trees under fair conditions is between seventy and eighty feet high and from two to three feet in diameter, though it is occasionally much larger. It is economically the most important of the sixteen Pacific coast oaks, not on account of its wood but because it furnishes the chief material used in the extensive tanning industry of that region. Fully a million cords of the bark worth \$18,000,000 have been used in the last sixty years in California in the manufacture of heavy leather. The wood of the tanbark oak is usually allowed to rot in the ground after the bark is removed. There are a great many purposes for which the hard, heavy material can be employed, such as flooring, wagon and car stock, and possibly cooperage. It makes excellent fuel.

Oregon oak (*Quercus garryana*), known most commonly as "white oak," is the largest oak in the Pacific coast region and the most valuable for its wood. It occurs mostly in alluvial high bottoms, valleys and prairies, from Vancouver Island southward through western Washington and Oregon into central California. It is the only oak in the Pacific coast of Canada. It is usually a medium sized tree with a short, clear trunk and a broad, round-topped crown, growing only in open mixture. The wood is yellowish brown, very hard, rather coarse-textured, strong, rather tough and durable. It is similar in quality to that of eastern white oak. Its principal uses are handles, furniture, cooperage, saddles and stirrups, boats, vehicles, interior work, fixtures, baskets, fence posts and fuel. About 2,000,000 board feet is consumed annually in Oregon, an equal amount in California for tanks and pipes, and 200,000 feet in Washington.

California laurel, Oregon myrtle or pepperwood (*Umbrellaria californica*) is an evergreen rather closely related to the camphor and bay trees of the Old World and the well-known sassafras of the eastern United States. Its range is from southwestern Oregon, where it is largest, to the southern border of California. It is variable in size and shape according to the site, but under favorable conditions makes a large tree of good timber form, but of limited occurrence.

The wood is of a rich yellowish-brown color, often beautifully mottled. The color can be improved and blackened by soaking the green and unseasoned logs in water. The wood is moderately heavy, hard, very firm, fine-textured, takes a high polish and fine finish. It is an excellent cabinet wood surpassed by none of our native hardwoods. Only the small supply limits its extended use for furniture, cabinets, mantels and novelties. Only a little over 5,000 board feet of the wood was reported consumed in one year by the wood-working industries of the Pacific coast.



Traffic Matters Around Memphis



It is definitely learned that practically all the railroads which joined in announcing an advance in rates of from two to six cents per hundred pounds on shipments of hardwood lumber and lumber products from producing points in the South Canadian destinations are preparing to file supplemental tariffs with the Interstate Commerce Commission, cancelling these advances. Officials of the Southern Hardwood Traffic Bureau, which has the matter in hand, are somewhat reticent about discussing the subject. It is known, however, that the railroads are filing such supplemental tariffs and it is expected that definite announcement will be made within the next few days to this effect by the Interstate Commerce Commission. The lumbermen appeared before the commission at St. Louis and Cincinnati and presented strong evidence against the proposed advance. The railroads are evidently of the opinion that the commission will decide against them and this is believed to be the reason for their course. While lumber interests feel confident that the railroads are preparing to cancel these increases, there is a feeling that it will be much better to let the commission reach a decision, as a favorable verdict from that tribunal will be a big factor in future fights with the railroads over these advances. It is therefore not surprising that lumber interests here are not altogether overjoyed by the fact that the railroads are on the eve of cancelling the advance in question.

The case of the Anderson-Tully Company, brought before the Interstate Commerce Commission for the purpose of securing an order forcing the lines west of the Mississippi river to issue through bills

of lading on export shipments of lumber, will be heard in New Orleans, February 27. George D. Burgess and J. H. Townsend, president and general manager, respectively, of the Southern Hardwood Traffic Bureau, F. B. Robertson of the Anderson-Tully Company, and other prominent exporters of Memphis and the western territory will attend this hearing and present evidence favorable to their contention. All of the roads west of the Mississippi river, with the exception of the Southern Pacific, have announced that they will issue through bills of lading on export shipments of lumber after March 3. The Southern Hardwood Traffic Bureau, however, is very anxious to have a pronouncement from the commission as to its authority over the carriers with respect to the issuance of through bills of lading and the officials of this organization are pushing the case to a completion in order that they may have a ruling from that body on this very important point. They believe it will mean a good deal to them in future dealings with the common carriers.

There will be a hearing at St. Louis early in March, covering the proposed increase on hardwood lumber shipment from points in Arkansas and Louisiana to Missouri, Kansas and Nebraska and the advance of two cents per hundred pounds on hardwood lumber shipments from Arkansas and Louisiana to Memphis and from Memphis and Mississippi points to New Orleans. This hearing at St. Louis will be followed several days later by a similar one at Memphis. These cases are in charge of the Southern Hardwood Traffic Bureau and there will be a number of lumbermen to appear before the commission at St. Louis, as well as at this point.



Introducing New Woods



The difficulty in making a new wood known and appreciated as an article of commerce, arises chiefly from the neglect when sent for trial from abroad. If small specimens are sent the wood is often pronounced to be of little value, because unknown in the market. The importer is sometimes advised to send the wood in larger quantities to market for a few years, as it will then have a chance of being tested and its true value more satisfactorily determined. The shipper is not often inclined to follow this advice. If he does send a quantity sufficiently large to be tried for manufacturing purposes, it is sometimes not brought to the notice of wood users. The timber is necessarily consigned by the exploiter to the agent of a steamship company, who transfers it to a broker by whom it is sold often with very little information respecting its properties, or the quantities in which, and the prices at which, it could be supplied, if it should happen to be available for a special purpose. The novelty of the appearance, or the strangeness of the name, is more often the subject of jest, than the wood is one of serious inquiry. As a general thing, the result is that the wood is sold at a price which does not pay the expenses of putting it on the market, and the promoter is invariably deterred from sending any more material. The exploitation of a very good wood is often stopped in this way.

The difficulties in bringing a new wood into use in sufficiently large quantities to be an article of commerce are usually very great. The promoter is, moreover, while the value of the new wood is unknown, subjected to the inconvenience of not having advances made at the place of shipment upon the timber he is shipping, as is the case with the well-known woods with a market value. Shipping agents are often reluctant to export a new timber under a strange name. It is on this account very often that new woods are shipped to market under the comprehensive name of mahogany or cedar, which have an established market.

There are a number of large wood users who inquire after new foreign woods likely to be useful in their special businesses, and

who, having obtained them, first make a scientific investigation of the mechanical and physical properties. After the species have been subjected to the practical working of the factory and found to be suitable, the manufacturer often secures a concession or buys large tracts of such timberlands and exploits it according to his needs. A manufacturer may justly object to employing a new wood with the properties of which he is only partially acquainted; and of which having investigated, he has no information as to the quantities or price at which it can be supplied, in the event that he finds it suitable for his purposes. Unless obtainable in quantity, regularly and at reasonable prices, he considers it inadvisable to use it. Therefore, in sending a new wood to market, it is very important that it should be accompanied with the necessary statistical information. The shipper should be in a position to keep up a regular supply for such manufacturers as have consented to employ it. Information, therefore, both of a practical and of a scientific nature, is essential for bringing new or little known timbers into use.

Ash Imitated by Pine

From Dr. C. A. Schenck, Darmstadt, Germany, the European headquarters of the Biltmore Forest School, comes a sample of Idaho white pine finished in imitation of ash, which, to say the least of it, is unique. The process appears to be somewhat similar to the "sugi" method supposed to have originated in Japan. The wood is rubbed with a steel brush, lengthwise with the grain, and the soft summerwood of the annual rings is thus worn down slightly below the general surface, producing the ash or oak effect. The imitation is completed by applying stains and fillers to give the desired color.

The process ought to prove successful with any wood of fairly wide rings in which the difference between the springwood and summerwood is well accentuated. The springwood is softer and is worn down more rapidly than the summerwood. Fir and hemlock should yield readily to the treatment. Steel brushes such as orchardists use in cleaning the bark of trees can be used.

✻ Handling and Assorting Logs at Mill ✻

Lumber manufacturers, notably those handling a variety of hardwood timber, know the essential value of being able to saw one kind of logs at a time and not being obliged to produce lumber indiscriminately from a half dozen or more varieties. In sawing timber the expert knows that to obtain the best results each kind of wood requires a slightly different hook of the saw teeth, and perhaps a little different swage and set, and that, to accomplish the best results, one kind of wood should be manufactured at a time.

It is impractical to assort logs in the woods, and equally so when loading onto cars or barges, or in rafting. Hence the only logical place to assort logs is at the mill. On the front cover of this issue of **HARDWOOD RECORD** is illustrated the Fitzgibbons & Krebs patent traveling derrick, which is a self-contained elevated derrick traveling on its own track and propelled by its own power. The gauge of the track, twenty-eight feet, is wide enough so that a boom pole up to seventy feet in length may be used. No guide wires are necessary. The hoisting engine which the machine contains transmits the power to the rear sets of trucks, which propels the machine backwards or forwards. The derrick track lies parallel with the railroad log switch so that the machine can travel quickly from one car to another while unloading, instead of dropping every car of logs to the machine, as is necessary when using a stationary derrick. The track is also parallel with the log haul-up to the mill. The derrick tracks are usually placed half way between the log switch and the log haul-up, and a log yard one hundred feet wide and as long as conditions will permit may be employed. The derrick track may be made to span the log haul-up with log car tracks on each side if desired, or the derrick track may straddle the jack-slip from a log pond.

By the use of this apparatus, it is not only easy to assort logs and pile them up in skidways for convenient use, but also to turn the logs so that the top end may first enter the mill. Every practical sawyer knows that a saw will stand better feed and do better work when entering the log at the top, or small end, than it will if entering at the butt, or tough end. When the log goes into the mill with the small end to the saw, the boards go to the edger with the narrow end to the edger saws. With this advantage, the edgerman can place his saws exactly right and can edge a board to its extreme width without waste. It is practical for the edgerman to make the saw strike exactly on the bark line, or both edges, at the narrow end on plain sawed stock, or on the bark and the beveled edges on the quarter-sawed stock. This method of always delivering the small end of the log to the saw effects a considerable saving each day, as one inch, or even a fraction of an inch, loss on one good, plain board may mean the loss of five cents, and on a quarter-sawed oak board may mean from seven to ten cents. So the use of this log derrick will effect a minimum saving on this one feature alone to more than pay the cost of its operation.

By the use of the apparatus, logs may be sorted in the log yard, keeping different kinds of timber separated or assorted for grade of logs. The resulting system in lumber manufacture is also a great advantage on the lumber sorting slip, as lumber of one kind can be sorted more accurately for thickness, length and grade with fewer men than when a half dozen or more kinds of lumber are coming through the mill at one time. It also simplifies the trucking of lumber to the yard. This machine has unloaded and stacked thirty-six cars of hardwood logs, 160,000 feet, in ten hours and at the same time supplied the mill with 40,000 feet of logs, making a total handling of 200,000 feet in ten hours. This work was done at a labor cost of seven dollars, or three and a half cents per thousand feet, the crew consisting of one derrick operator and three laborers. A log containing 1,000 feet or 2,000 feet is handled just as easily as the smallest log. By means of this system and on account of the rapidity with which log cars can be unloaded, the lumberman has no dread of a failure in car

service. The railroad's equipment is quickly turned back to it, and a stock of logs can, at all times, be kept conveniently at hand in surplus supply, and expensive shut-downs be avoided.

The cost of these machines is from \$3,000 to \$4,000. The machine itself is of home construction, made on the ground. The patentees furnish complete plans and detail prints, so that any millwright can erect the apparatus, the construction being practically all straight woodwork, and very simple. A full list of timbers, bolts, washers, etc., is furnished, so that the actual cost can be readily figured. At the present time this derrick is being used by the Wood-Mosaic Company at its New Albany, Ind., plant; by the Green River Lumber Company, Memphis; Nickey Brothers Hardwood Lumber Company, Memphis; Nickey & Sons Company, Memphis; R. J. Darnell, Inc., Memphis; Memphis Veneer & Lumber Company, Memphis; McLean Hardwood Lumber Company, Memphis; Wisconsin Mill & Lumber Company, Huttig, Ark.; McLean Lumber Company, Chattanooga, Tenn.; McLean Lumber Company, Birmingham, Ala.; J. F. McIntyre & Sons, Inc., Pine Bluff, Ark.; and (in course of construction) by the Saline River Hardwood Company, Pine Bluff, Ark. The first of these apparatus was built nine years ago and is still giving as good service as when first installed.

The cover illustration and this text is published in **HARDWOOD RECORD** not as an advertisement but as an educational feature to assist in the development of what is regarded as an excellent method of log handling and assorting and one which spells higher efficiency and lessening cost in log handling. At the same time, in deference to the owners of the patents of this apparatus, it is glad to advise that further information on the subject can be obtained by addressing O. M. Krebs, Memphis, Tenn., Mallory Branch.

Lumbering in the Bahamas

It does not take the British government a year or more as it does the Bureau of the Census and the Forest Service in the United States to make a census report on the lumber industry of the Bahamas. In fact, it is a very short and painless operation both to the government and to the producers since there is only one operation which can be so dignified by the designation of operation. On the little island of Abaco, one of the most northerly group of the Bahamas, is a modern sawmill plant which, as might be guessed, is backed by American capital and in charge of lumbermen schooled in the States. The mill cut during 1912 a total of 12,757,986 feet of timber of which amount 11,491,131 feet was shipped from the island to Cuba.

The plant of the company is located at a town called Wilson, on the east coast of Abaco Island, where a very fair harbor exists. The population of the place is close to 500 and practically all the business of the town is dependent upon the operation of the lumber company.

The timber of Abaco Island is reported to be largely Cuban pine (*Pinus caribaea*), and not long-leaf (*Pinus palustris*). Cuban pine also is known variously in Alabama, Mississippi, Georgia and Florida as slash pine, swamp pine, bastard pine, meadow pine, pitch pine, she pitch pine, she pine and spruce pine. Its distribution is in the coast region of South Carolina southward over the coast plain to the Keys of southern Florida and along the Gulf coast to the valley of the Pearl river, Louisiana; common on the Bahamas, on the Isle of Pines, and on the highlands of Central America. The wood is heavy, exceedingly hard, very strong, durable, coarse grained, rich dark orange color, with thick nearly white sapwood.

Not only does the Abaco Island operation turn out lumber but an ice making plant is operated in conjunction. And as is the case with the lumber produced, the company has an excellent market for its ice. The plant supplies practically all of the ice used in the Bahama Islands and the warm season is twelve months long. Ice retails on the island for one cent a pound in contrast with thirty cents a hundred pounds in Chicago.



The Truth About Catalpa



Probably no other tree has been so generally recommended for planting throughout the Middle West as the hardy catalpa. Probably, too, only one other tree (eucalyptus) is suffering so much from indiscriminate praise of over zealous friends, and unscrupulous promoters. Many of the plantations that are fifteen years of age or older have made good financial returns, but a large number have scarcely paid for the cost of their establishment and maintenance; still others have been complete failures. The failure to get good results is usually accounted for by concluding that the wrong kind of catalpa was planted. While such a conclusion is often true, more often unfavorable situations and lack of proper treatment are responsible.

It has long been recognized that only the true strain of hardy catalpa (*Catalpa speciosa*) is fit to plant. The ordinary form (*Catalpa catalpa*) so common as a shade tree, and the Japanese variety (*Catalpa kempferii*) are worthless for anything but decorative purposes. The species apparently hybridize so that even though seeds are collected from the right tree the resulting seedlings may be mongrels. Catalpa seeds and seedlings look so much alike that often an expert is fooled and only time can correctly answer the question by showing the character of the trees.

The hardy catalpa is exacting in its demands upon the soil. The land for its best development is such as will produce a good corn crop. It will not make a satisfactory growth in gumbo, sterile, poorly drained, or high, dry soils. The use of good corn land for such purposes is hardly a sound policy. The proper lands for growing timber are those not well



A SPLENDID SPECIMEN OF HARDY CATALPA GROWING NATURALLY IN EASTERN ARKANSAS.

suited for agricultural or similar pursuits. Exceptions are found in the case of windbreaks where strips of good land may profitably be devoted to trees because of the beneficial results to the protected fields. The catalpa, however, is not a very good tree for this purpose, but is well adapted for planting on creek and river-valley lands subject to inundation. Occasional floodings of short duration do not injure the trees unless their tops are submerged which would probably occur only during the first or second year after planting.

About the only uses for which catalpa is suited are posts and poles. It is too soft for railroad ties even if they could be produced in a short time, which is impossible. In treeless states it is prized for fuel but only because harder woods are not available. If the trees were of sufficient size they would make excellent lumber for use where strength is not required. The wood is light, soft, porous, not strong, easy to work and noted for its resistance to decay. There is good reason to believe, however, that the durability of rapidly grown young timber such as most planters desire to obtain is greatly overestimated.

So few people have seen forest-grown specimens of the tree that it is not generally known that it sometimes reaches large proportions. In the rich bottom lands of the lower Ohio and Wabash valleys and along the Mississippi occasional individual trees six feet in diameter and over a hundred feet high greeted the early lumberman but have long since disappeared. There are, however, some good specimens of smaller size still standing.

It is not to be inferred from the



YARD CONTAINING 60,000 POSTS AND 650 RICKS OF WOOD CUT FROM TWENTY ACRES OF SIXTEEN-YEAR-OLD HARDY CATALPAS.

preceeding that the catalpa has no redeeming features. It has, but they have been so over emphasized that a word of caution seems desirable. In some parts of the country nursery firms are sending out smooth-tongued agents selling catalpa seedlings at \$20 to \$25 per thousand. This is from four to ten times their actual value for they are the most easily grown of all tree seedlings. Seed true to name can be procured from reliable dealers very cheaply and the

plants can be grown with the same ease as radishes. Since the cost of the planting stock (which must be computed at compound interest for from twelve to twenty years) is often the principal factor in determining the financial success or failure of the plantation it deserves very careful consideration. The catalpa is all right in its place but its greatest financial returns so far have inured to nursery-men and unscrupulous promoters.



Co-Operation and Sales Efficiency



Modern methods of business show some startling revelations compared with those of olden days and are especially marked in the case of some of our concerns of national reputation. In former years a product was made and sold to whomever would buy. As time wore on, transportation facilities increased and made accessible much broader markets. As a result manufacturing establishments have had to increase capacity until now production is the most enormous we have ever known. As transportation facilities have increased, so has each step in the process of manufacturing been more closely analyzed. Now, with production at top-notch, steps are being taken by the employment of efficiency engineers to add from a quarter to a half more with the same investment, same number of men and the same expense, by simply applying a new and modern method of handling men, work and machines. It is simply a sign of the times, or in other words, progress.

Aside from all other problems of importance that the large manufacturer has to deal with, the most important today are those of organization and sales efficiency. Modern methods of merchandising practiced by some of the largest concerns are worthy of emulation by the lumber business. It is said that we are all too close to our own business to see the defects therein and in this case an outsider is more capable of telling us of defects in our methods, or of indicating where we are losing money. In general, it is safe to say that one cannot get many new ideas in merchandising lumber from the lumber industry—he must watch the methods of some manufacturer or merchant in an entirely different line of business. There it is always possible to get points that can be applied to advantage in merchandising lumber. This has already been done by one or two lumber concerns, as some of the following examples will show.

In past days we all attended to our own affairs and didn't worry about what was happening to the other fellow. Consequently there were all sorts of conditions that were detrimental to all. Today there is everywhere a spirit of co-operation. We have meetings of manufacturers, of jobbers, and of retailers, who confer with one another to effect an uplift of business in general because it is recognized that each receives his share of benefit thereby. We meet and discuss different problems, exchange ideas and each probably gets points that are applicable to his business. But how many really carry the spirit of co-operation back with them to apply in their own concerns? Probably very few.

How about the spirit of co-operation as between you and your salesmen and office force? Have you a perfect organization? Do you realize that your office boy and your salesmen are factors or cogs in the wheels of your organization just as you are yourself? By using the spirit of co-operation you can swing a disorganized mass, each individual of which is pulling in a different direction, into line, and thereby secure the maximum efficiency.

To illustrate: One of our largest manufacturers—not a lumber manufacturer by the way—gave his annual dinner recently and as usual, called in all his salesmen, some of whom had to journey from the Pacific coast. He also had present all of his office force, superintendents, foremen and heads of each department even down to the department of shipping and inspecting; in fact, his entire organization. I met the sales manager recently and in part he said, "After the dinner there were talks by the heads of each department on the products of this concern. Next day we all went through the plant and the superintendent and the heads of each department

explained in detail each process and also the new methods put in since the last yearly meeting. It's a good thing, I think, once a year to have everyone refresh his knowledge of the manufacturing end no matter how well he knows it. In the afternoon we held an open meeting. The salesmen brought up new selling ideas as well as new objections that they had to fight against. The advertising men got many new pointers and the advertising manager outlined the plan of campaign for the coming year. The superintendent learned of some defective points in the manufacturing end by hearing the salesmen talk. He in turn, made some suggestions in the selling end. Each man got up and said something and each went away fired up with enthusiasm and a determination to go in and work his hardest. The men who had won the money prizes for the best records went away determined to eclipse their former records."

There you have the spirit of co-operation and one by one you see concerns of national reputation adopting this method because it means increased business, an improved product and the welding of the whole concern into one unit.

This dinner idea is a good one. I believe Andrew Carnegie was one of the first to adopt it. Each week he would set aside a night for the dinner and have all his heads of departments discuss the various problems of manufacture. In this way he secured the active interest which brought out many ideas that perfected his methods and brought him success. I know also of one lumber manufacturer who carries out this idea. He has even the sawyer and the filer at this dinner. In fact, it is said that many of the suggestions of the sawyer and of the chief inspector find use in the sales-department and vice-versa.

I heard recently from one of our largest lumber operators enjoying the co-operative spirit. This concern used to be one of the easy-going kind and I was so interested in hearing the man who owned it tell about it, that I made the trip purposely to see how it was working out. The operation was mammoth. As far, seemingly, as the eye could reach, there was lumber—millions and millions of feet. The minute I got off the train I was conscious of a feeling of power, speed and purpose. It seemed in the very air. Two western lumber manufacturers were with me, one of whom after going through the mill and finally meeting the superintendent—a man of about twenty-five—exclaimed, "Dog-goned if it don't look like the place is run by kids" which remark, although ungrammatical, nevertheless expresses a fact. There is hardly a man over twenty-eight and there are some that are but twenty-two, but the mill pays the best wages of any in the section. In the morning, before work starts, there are about twenty men applying for jobs. It's the most popular mill in the South. There's the first point in co-operation—they pay good wages. Now let's see how it works out.

The whistle blows at 6 a. m., but the engineer wanders in about 5:30 and starts the engine going about 5:40, and by 5:50 the mill is going full tilt, every man at his place working to full capacity. When the whistle blows at noon or night, there's no mad rush to get away. Sometimes the mill runs five or ten minutes after. What is the secret? Interest! And interest is co-operation. The men's quarters are good; their food is plain but good, and they're the healthiest crowd I ever saw. The concern does everything to make the men contented. Even the drinking water is tested frequently. When the men see the interest that is manifested in them, that interest is reflected back in their work.

You never saw such a busy mill in your life. The boards just keep shooting out of the mill and everyone is "on the run." Four mules and drivers take the lumber from the sorting shed to the piles. When a team comes back for another load, it comes back on the run. Efficiency?—It would do you all good to see this plant. Every man plays team work with the other fellow. Honestly, the whole outfit looked more to me like a college team with all its spirit and enthusiasm, than an industrial organization.

When a new step is to be made, the heads of the concern, the under managers, the superintendents and chief of inspectors, get together and discuss the problems. By getting the benefit of each man's ideas a plan is shortly whipped into shape. And a plan made up of the ideas of several is generally better and less vulnerable than one formulated in only one mind.

In talking with another sales manager recently, I was much surprised to find him using the "premium method" with the salesmen. "Yes," said he, "and it pays. We first figured it out on the basis of each man's former record and then we set the mark quite a little above them. The contest closed the end of the year—this is the first year we tried it—and one of the boys got a check for eleven hundred dollars, the first prize. The check was handed out graciously because the man had earned it. The concern did a much larger volume of business over the former record and that check represented only a small part of the profit. This may seem a lot of money for a concern to hand out to a man but the trouble with most concerns is that they are too short-sighted; they hate to give away, as they call it, any extra money. They lose sight of the fact that they are doing a larger volume of business and therefore making extra profits on the same expense.

"The way I size up a selling organization," this sales manager continued, "is that it is a team. I bring my 'team' in several times a year and we talk everything over. The salesmen criticize me and I jump on them. Then we make suggestions, adopt the good ones, cut out the obsolete methods, learn the best selling points and how to use them as points of attack. Each man has ideas and this is the way we all get the good of them. They were especially enthusiastic over the idea of a contest when one of the men suggested it, and they have all worked hard. You know, salesmen are just boys grown up and must be kept interested. Under all conditions a salesman wants to be bright, cheerful and optimistic, and when he feels that he has a good and an appreciative organization behind him, he has no trouble to be so."

There is a splendid example of organization and sales efficiency and yet the idea came from an entirely different line of business. I still claim that you have to go outside of the lumber business to get modern ideas. Here is another example of the trend of the times—yet if you put the same proposition to many millmen, they will say it cannot be done. A very large manufacturer of lumber recently put on salesmen in the different sections. He formerly sold entirely through wholesalers and yet he didn't want to lose his wholesale trade. So he made a price arrangement whereby the wholesaler was quoted a special price and much below that which his salesman had. Not one of his salesmen, however, knows to what wholesalers the concern is selling, and of course, is not allowed to call on the wholesale trade. They also have instructions that in the case they recognize a car of the mill's stock that was sold by a wholesaler, to simply commend the stock as if it were a competitor's.

The business of this concern has doubled; in fact, it says that very shortly it will be almost three times as great as in former years. The head of this concern has kept step with modern times and methods. He realizes the value of the legitimate wholesaler and that his class will always remain in business. He makes the difference in price, knowing that his cost of selling the wholesaler by letter is much less per thousand feet than by selling through his salesmen to the consuming trade.

The mill-to-consumer idea that most of the mills seem after may work well in good times and good markets, but just watch those very mills fly to the wholesalers in dull or panicky times. These mills can't watch credit from afar and they know that the average

wholesaler is good for what he buys. The man referred to above has the advantage for he can call off his salesmen at any time and yet have his wholesale trade.

The mill-to-consumer idea is splendid in the lines of trade-marked goods, but except in the case of the large national concerns such as the National Biscuit Company, National Cash Register Company, etc., that have enormous capital to effect economic distribution, the wholesaler in his respective city is relied upon to effect distribution. Where the price of an article is standard and advertised, the wholesalers have their profits dictated by the manufacturer, but in almost every case the profit is a fair one.

H. E. S.

Timber Cutting and Moon Phases

During the last few months newspapers have revived the well-worn tale that wood cut during the crescent of the moon does not last as long as that felled during the wane, and especially from the last quarter to two or three days before the new moon. It is believed by many that timber felled after the new moon and until after the full of the moon, splits more freely and does not possess the durability of timber cut at another time. A good many farmers are still influenced by this belief and pay special attention to the phases of the moon when they wish to prepare fence posts or structural timbers which are to be placed in contact with the soil. They consider that fence posts cut during the wane of the moon preserve all their best qualities.

While it is well known that timber cut in spring and summer is not as durable as that cut in winter, when the life processes of the trees are less active, no one has yet been able to produce a scientific explanation in support of the popular opinion that the phases of the moon exercise a marked influence on the durability of the wood cut at different periods.

It was also considered that this influence of the moon is much stronger in the tropics than it is in the temperate zones, but as a result of experiments conducted on the island of Trinidad, just off the coast of Venezuela in South America, a few years ago the theory was finally rejected as one having no foundation of fact.

While this opinion respecting the influence of the moon on the quality of the felled timber has already been the subject of much and varied discussion, it has never appeared reasonable enough to the intelligent wood users in this country to induce them to conduct a careful experiment. It is evident that if this matter were not free from doubt the railroads in this country, which use over a hundred million cross-ties annually, would look into it very critically. It is, however, certain that no such lunar influence exists and that the proposal to fell a tree during a certain quarter of the moon as a panacea against decay is entirely chimerical.

Car Statistics February 15

The statement of car surpluses and shortages issued by the American Railway Association under date of February 21, showing car conditions on February 15 establishes the fact that there has been an increased shortage and a decrease in surplus from February 1 to February 15. Figures show a total surplus February 15, 1913, of 52,700 cars, and a total shortage of 30,517 cars.

On February 1, 1913, the surplus was 62,045 cars and the shortage 24,785 cars. A year ago, specifically February 14, 1912, there was a total surplus noted of 50,886 cars and a shortage of 36,928 cars.

There are ten groups listed, each group having reports from the number of railroads comprising it. For instance, the New England group made up of reports from eight roads showed surplus of 1,334 cars and a shortage of 484 cars. The Virginia, West Virginia, North and South Carolinas group embracing thirty-two roads, showed a surplus of 10,450 cars and a shortage of 4,232 cars. The Kentucky, Tennessee, Mississippi, Alabama, Georgia, and Florida group containing reports from forty-seven roads showed a surplus of 1,189 cars, and a shortage of 3,714 cars. The New York, New Jersey, Delaware, Maryland and eastern Pennsylvania route having reports from fifty-nine roads showed a surplus of 5,887 cars, and a shortage of 2,141 cars.



In the Lair of the Eucalypts



This publication has contained several articles within the last few years deprecating the alluring statements being made by sundry promoters of eucalyptus growing land schemes in southern California. It now wishes to reiterate and emphasize all the statements it has hitherto made on this subject, and to further advise investors that the claims of the wonderful profits possible of attainment in eucalyptus growing are absolutely chimerical. There is not one chance in a thousand of attaining a fairly good profit out of an investment in these projects. They are schemes, pure and simple, to separate the amateur investor from his money.

When and how the commencement of eucalyptus planting in southern California transpired is not a matter of accurate history. Various types of eucalyptus, largely blue gum, were brought over from Australia and planted thirty to fifty years ago. By reason of its comparatively rapid growth it was planted by ranchmen along the edges of fields to form windbreaks, which before the advent of comprehensive irrigation systems were regarded necessary to insure anything like satisfactory crops, either of grain or fruit. These rows of trees about immense fields in that region have grown in many instances to trees of considerable size.

To be sure, they are short-bellied, scraggly, and ill-smelling trees, generally twisted in bole, and probably are the most unbeautiful that were ever devised by the Almighty. The center picture on this page shows what is probably as good a specimen of eucalyptus as grows in the entire country, but this is an exceptional tree.

The picture at the left shows some of the growth thirty or forty years old, planted as windbreaks, and the picture at the right shows long lines of these lumpy, scraggly trees on either side of a roadway.

The average ranchman of southern California is now apparently just as desirous of getting rid of eucalyptus as he was originally to secure it. These men have found that eucalyptus exhausts the soil for fully forty feet on each side of the line of these windbreaks, and thus renders it impossible to grow anything within that distance from them. Among these people eucalyptus is popularly known as the "thief-tree"—stealing as it does all the nutriment of the soil for many feet about it.

There is one Los Angeles company, recognizing

this situation, that has purchased a quantity of eucalyptus windbreaks from ranchmen to an alleged extent of ten million feet, within a comparatively limited area, and is sawing the wood into squares and from it producing handles and wagon stock in a considerable quantity. This company alleges that it is getting good financial results from its enterprise, and its handles, spokes, etc., certainly have the appearance of being a very good commercial output. In view of the absolute paucity of hardwoods on the Pacific coast it would not be surprising if a local trade could be built up out of these eucalyptus products for the purposes named, that would be fairly remunerative, although it is doubtful if the wood has equal merits to hickory.

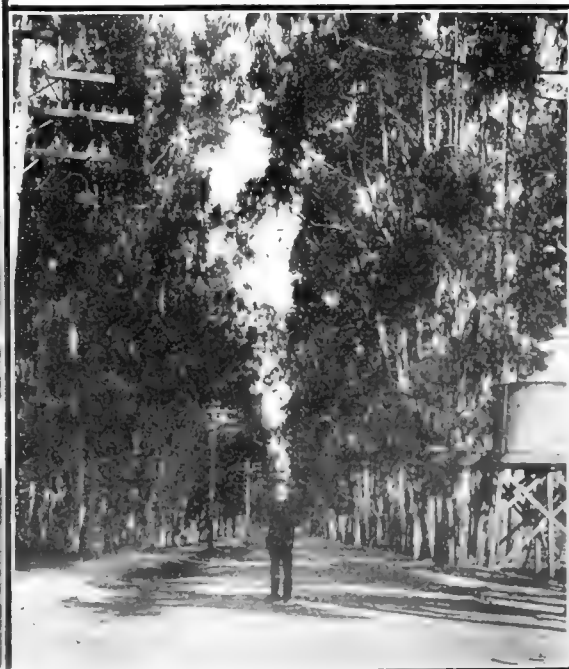
There is also a legend that one other man in southern California has made some money from the manufacture of eucalyptus into lumber and veneers. Outside of these two enterprises, and such of the wood that has been employed to a limited extent for railroad ties, and such as is being used for fence posts and cordwood, these constitute the entire commercial history of the wood in utilization in the entire California country.

The Santa Fe Railroad and quite a number of individuals have during the past few years planted comparatively small areas of eucalyptus, but from an examination of these wood lots, the writer wishes to assert that they are the most unpromising exhibition of practical forestry that he has ever seen. It is just possible, by proper thinning, that within thirty to fifty years a growth of eucalyptus could be accomplished that might have some little possible value for lumber and railroad tie purposes, but it is extremely doubtful if the wood has any essential value save for fuel purposes.

Again, it is perfectly safe to allege that any California land that will grow eucalyptus will produce ten to one as much revenue if it were planted to any of a dozen varieties of field or citrus crops.

As a tree-growing proposition, eucalyptus is a gigantic fake, and is unknown as a commercial proposition in California. It is heard of only east of the Mississippi river, where unscrupulous promoters are attempting to rob the public on these fake eucalyptus growing land sales.

To quote a letter from one of the two eucalyptus



utilizing companies: "It is a fact that some over-optimistic and unscrupulous land promoters have over-estimated the earnings or profits to be derived through the purchase of land planted to eucalyptus. * * * Frankly will say to you that from practical experience we have demonstrated beyond any question of a doubt that there is as little, or less, waste in the sawing of eucalyptus and converting it into a finished product as there is to any other hardwoods. We know absolutely we can have made, or make them ourselves, various articles from eucalyptus in long lengths and various sizes for general blacksmithing and wagon work, and where the consumers have been supplied with this wood it has been demonstrated it is superior to any other hardwood used for similar purposes.

"Further, we have successfully made veneering, and anybody who has seen this wood finished and dried in a thorough and workmanlike manner cannot say other than it takes a very high and beautiful polish with a grain that is handsome, and that the wood is serviceable. I would add further that furniture manufacturers who have had experience with eucalyptus veneering have approved of it, and are

today ready and willing to give us orders for veneering provided only that a positive assurance can be given that an adequate and continuous supply can be had."

While not having as high an appreciation of eucalyptus as the writer of the foregoing, it is only just to quote his opinion.

A well-versed lumberman who has spent a good many years in California, makes this deduction of the eucalyptus proposition:

"Regarding the eucalyptus proposition will say that I do not think much of it. In the first place there is not enough timber growing to attempt to create a demand, for any great quantities could not be furnished. The timber standing today is only an accident as it was planted for windbreaks and not for the purpose of filling 'a long felt want,' with the expectation of being used as a substitute for hardwoods. It is all tommy-rot about the immense profits to be derived by planting them. Any well posted and truthful individual will admit that it takes from thirty to fifty years for trees to become of commercial value. The soil cultivated for any other purpose would yield much greater returns. Therefore, in my opinion this game is only a crazy man's dream."



A Pointer on Selling by Width



The increasing popularity of the system of selling hardwood lumber according to width, in order that the customer may be able to buy stock that will require the minimum amount of working in his factory, has developed a number of wrinkles that the lumberman has need to look out for in handling the business.

The necessity of pricing this stock in such a way that the increased expense of handling will be taken care of, along with a proper charge for the extra service performed in separating the various widths, is well understood. The customer is perfectly willing, as a rule, to pay the added price, knowing that he is getting it at a figure which is a good deal less than the expense of working random widths would involve. So this feature of the situation is all right, from all standpoints.

In the actual measurement of lumber sold on this basis, however, there are occasional troubles which are likely to be overlooked by the dealer who has not given special study to the details of handling this trade. In measuring according to widths the 12-foot scale is of course used. The inspector who tallies the lumber, unless he has received special instructions in this connection, is likely to follow the usual system, and "call up" widths which are over the half-inch mark, as well as "call back" those which are under it. In the usual system of measurement this is a satisfactory method of equalizing irregularities of width, and the force of habit is sufficiently strong to result in the same plan being used when lumber is being loaded according to width, unless the inspector is apprised of the impracticability of using this plan.

In order to dispose of the question satisfactorily, the only safe plan is to use the minimum width all the way through. If 7-inch widths are being picked out, only boards which are a full 7 inches in width, or over, can be used. Those which are $6\frac{3}{4}$ or $6\frac{1}{2}$ inches, and would ordinarily be tallied as 7-inch boards, must be thrown out, as far as that particular item is concerned, while if the same customer is buying lumber 6 inches wide, they can, of course, be used in that connection.

The obvious objection to this plan is that the buyer gets all the better of it. He gets the benefit of all the "breaks," since the seller cannot equalize them by giving himself the increased measurement on the "overs," as he does in the case of most shipments. The customer gets as 6-inch lumber all the boards that are 6 inches and over in width, and pays for 7-inch stock on the basis of all the boards that are between 7 and 8 inches in width.

Those who have not given this question attention may be inclined to discount its importance and to estimate the footage involved in a car as too small to worry about. That this impression is not correct was borne out by a recent experience of a hardwood concern in an Ohio

valley city. A carload of thin quartered oak of a given width was shipped to a New England chair manufacturing concern. The inspector who loaded the lumber was a well qualified and thoroughly experienced man, but he had not gone into the matter of tallying according to widths in a case of this kind, and for that reason he gave his concern the benefit of all the boards that were over the half-inch marks.

The lumber was shipped and in due time the customer was heard from. Though the distance was over a thousand miles his kick was felt distinctly at the point of origin of the shipment, and that without the aid of a seismograph. He kicked on the measurement of the lumber entirely, and not on the grade, which was all right. But the measurement differed from that of the shipper by over 1,000 feet! As this was on a shipment of good quartered oak stock the amount involved, as the reader will have anticipated, was enough to make the members of the firm which made the sale do some tall figuring trying to understand how it happened. A little correspondence developed the fact that the buyer had measured the lumber in the form indicated, while the shipper had used the ordinary board measurement system, to his ultimate detriment.

The worst feature of the whole situation was the fact that the purchaser of the lumber could not use boards that were of less than the specified widths, because they had to be finished for use with that dimension. The buyer, as a matter of fact, was purchasing dimension stock, although the result was obtained not by remanufacturing but by sorting, and obviously he specified widths that came as close as possible to the dimensions of the finished material. When he got narrower stock than this, he was unable to use it, no matter how strongly the argument might be made that it was unfair to the lumberman to deprive him of the measurement on all boards wider than the dimension specified.

In the case referred to the settlement was made on a basis that eliminated most of the profit, but members of the firm are now experienced enough to avoid making the same mistake over again. Hereafter, when they sell a car according to width they are going to allow for the loss in measurement which will result from the use of the 12-foot scale in this way and are going to make a price accordingly.

This, incidentally, is the only solution of the problem. It might be argued that the proper way to handle it would be to sell according to half-inch divisions, and that when sorting for width in the lumber yard to pile 6-inch, $6\frac{1}{2}$ -inch, 7-inch, $7\frac{1}{2}$ -inch, etc., separately, so that when the time came to load out a car of any given dimension there would be no necessity of giving the buyer something for which he would not be called on to pay. But there are a number of

practical difficulties in the way of the adoption of this plan. One is the greater amount of stock that would be needed to carry on the business, and to get a carload of any given dimension, and the other is that buyers seldom ask for widths of odd dimensions, usually ordering according to whole numbers.

The plan which seems to fit in with the needs of the situation most exactly is to keep in mind the probable loss that will be suffered and then charge for it. The lumberman realizes thoroughly when he sells a car of selected stock that he has had to put in additional labor to sort out the special widths wanted; he probably has had to do a good deal of careful sales work in order to find buyers for the various widths, and consequently he knows that he must ask a price for the lumber which will take care of the extra expense.

In the same way he can figure approximately, by reason of experience (and he can make actual tests which will determine the facts), what the loss in measurement is when the 12-foot scale is used as described, compared with ordinary board measurement of random widths, and consequently the proper system is to make an allowance in the price for this factor. Otherwise the result is likely to be a smaller profit per thousand than appeared from a superficial examination of the price at which the lumber was sold, compared with the figures quoted on unsorted material.

Another point that should be remembered in sorting lumber according to width, with the idea of being able to offer special service to the consumer, is that the especially wide stock necessarily must carry a higher margin of profit than the narrower boards. This is for the reason that the wide stuff usually has a considerable premium anyway, and the lumberman could get this without sorting if he were to sell on a basis of a shipment containing a given percentage of wide stock. As far as these items are concerned the labor of sorting them is more

or less unnecessary, from a sales standpoint, and is not required in order to get the maximum price for them. It is, however, a big convenience for the buyer who has been contenting himself with buying random widths, with a guaranteed percentage of wide stock, to be able to buy that class of lumber exclusively if he needs it, and he consequently should pay more in proportion for it than would be indicated by the premium offered for the percentage of extra wide stock included in an ordinary shipment.

As a matter of fact, many lumbermen who have gone into the question of sorting for widths have found that it is much easier to get the advanced price which they ask for narrow stock than for wide. Consumers who have been using the narrow stuff, but buying random widths and having to do a lot of ripping in order to get the right dimensions, have realized at once what a big saving they are making in securing the dimensions they need, while those who want wide stock have been getting a good deal of it by the payment of a comparatively small premium for its inclusion in a shipment of random widths. They fail to realize the extent of the service offered them by the lumberman who is prepared to give them exactly the widths they need.

The lumber dealer who is featuring the sale of special widths is a good deal like the millman who is cutting up his lumber into dimension stock: he must get a price commensurate with the added value he has given his lumber if he is going to be able to continue handling it in that way. The surest method of coming to grief in this business, just as in dimension manufacture, is neglecting the cost of performing the various features of the operation and failing to make a proper charge for them. Only by studying all of the elements involved and determining the proper price with reference to them can a fair profit on every sale be insured.



Climatic Changes Recorded by Trees



In regions of well defined seasonal changes the growth of a tree is marked by the formation each year of a layer of new wood intimately joined to that of the preceding year. Variations in width and composition of the annual rings of growth form a permanent record of the conditions under which the tree grew. The occurrence of a severe fire, an insect infestation, an unseasonable frost, or periods of abundant rain or drought may be read from the effects produced upon the wood formation from year to year.

The forester employs growth rings in determining the age of trees and in calculating the growth and yield of individuals and of forests. It has been only recently that there have been found in them evidences of climatic conditions and changes in times past. For more than two years work of this kind has been conducted under the direction of the Carnegie Institution of Washington. Part of the work was concerned with a study of data previously obtained by the United States Forest Service and part from original measurements of the stumps of a large number of the big trees of California.

A few of these trees proved to have started more than thirty centuries ago, the oldest being 3,150 years. Careful study of the rate of growth of over three hundred of the giant trees, many of them upward of 2,000 years old, strongly supports the belief of very decided fluctuations in climatic conditions extending over periods of several hundred years.

From the thousands of measurements or analyses gathered by the Forest Service in its investigation of tree and forest growth, a large number of the records of the oldest trees of certain species have been chosen for special study. Some of the species represented are western yellow pine in the northern and southern limits of its range; Jeffrey pine in southern California; Douglas fir in the Northwest; white oak and yellow poplar in the southern Appalachians; and red spruce in the north woods. It is only by averaging the rates of growth of a great many trees growing in widely different parts of the country and under essentially different local conditions that it is possible to eliminate

the many local factors affecting the development of individual trees and stands.

One conclusion from the study of western yellow pine in Arizona is that the climate of the Southwest is becoming drier, the snowfall less, the winters shorter, and that it has been doing so for a long time. This finding is corroborated by the presence in that country of irrigation ditches and other ruins of an ancient people, indicating that water was at one time fairly plentiful in places now remote from any signs of springs, streams or other sources of supply. Investigation of the rate of growth of the same species of tree in Idaho indicates that the winters there are also shorter and the snowfall less than formerly, but in this case the change in conditions is favorable to tree growth since it is producing a longer growing season.

In order to study the interior of living trees a form of drill was devised for removing a solid core of wood extending from the center to the bark. With these it is hoped to obtain data from the largest and oldest specimens of the big tree, which will throw more light on conditions as they existed thirty centuries or more ago.

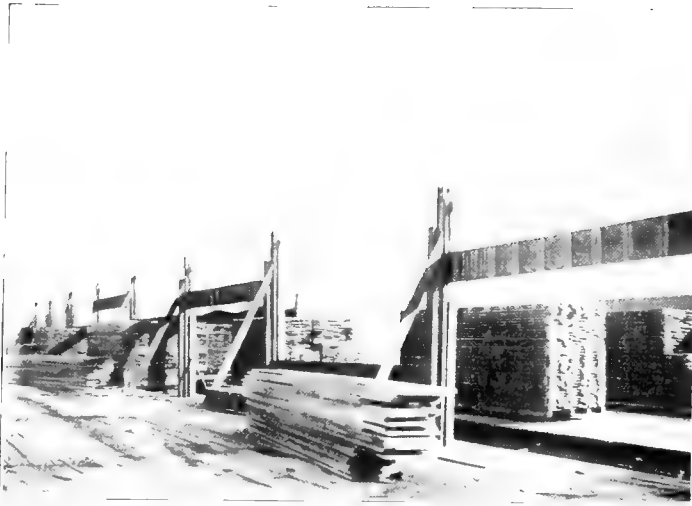
According to the Ohio forester a large paper manufacturer in Ohio has leased and purchased nearly 300 acres of land subject to overflow and in low territory and has set out nearly 150,000 Carolina poplar trees to grow pulpwood.

* * *

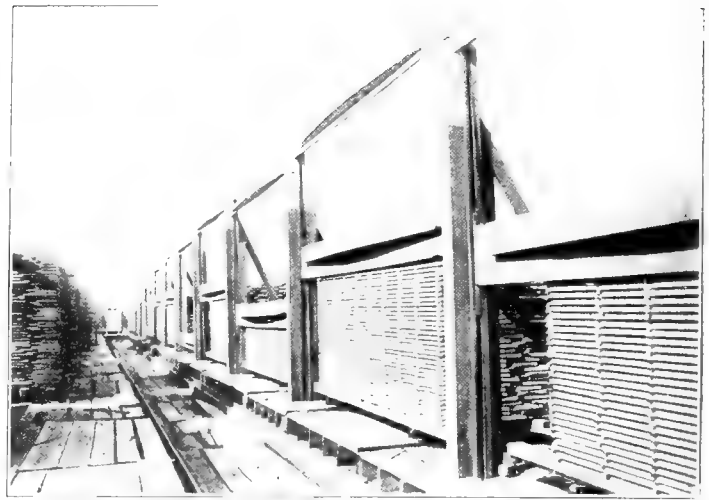
A woman in Summit county, Ohio, has a small pasture of six or seven acres. Several years ago, in cutting out a portion of the trees where the stand was too dense for the good of the pasture, she left the walnut trees. In 1911 she sold from these trees \$114 worth of nuts.

* * *

The cheapest and most efficient method of protecting young fruit trees from the gnawing of rabbits and other rodents is to place around the stem a guard of rotary cut veneer.



LOADING PLATFORM AND COUNTER-BALANCED GUIDES FOR ACCURATELY PLACING PILING STICKS. LAMB-FISH LUMBER COMPANY, CHARLESTON, MISS.



PART OF LINE OF LOADED TRUCKS SHOWING SECTION OF TRANSFER AND CROSS-OVER TRACK, LAMB-FISH LUMBER COMPANY, CHARLESTON, MISS.

Kraetzer-Cured Lumber

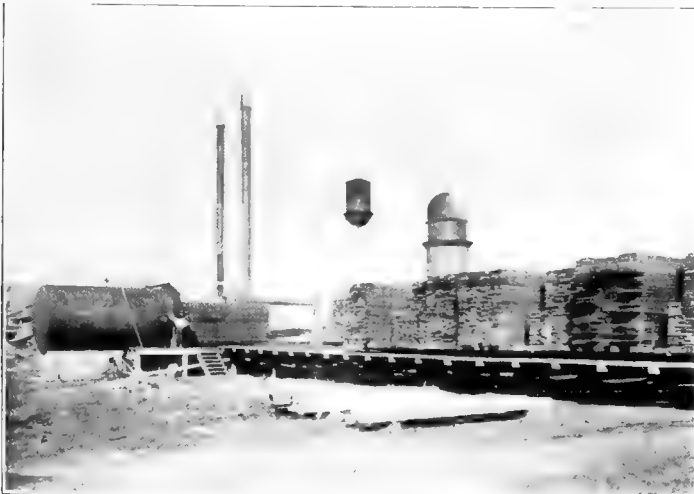
A common-sense method of lumber seasoning, as exemplified in the employment of the commercial wood steaming apparatus known as the Kraetzer steam cylinder preparator, has been previously discussed in *HARDWOOD RECORD*. Lest there be confusion in the minds of lumbermen on the subject, let it once more be stated that this apparatus is not a dry kiln, but an equipment for steaming under pressure the daily lumber output of a sawmill for the purpose of preparing it for quick and accurate seasoning, either in the open or by the agency of a dry kiln. By either method, lumber previously steamed under pressure is dried in less than one-third of the time that is possible with unsteamed wood.

Either a half score of the foremost lumber manufacturers in the United States are deluding themselves very seriously in the use of this equipment, or it is attaining for them drying results heretofore undreamed of. In economy of handling lumber and seasoning it, it is thoroughly demonstrable that the use of this apparatus effects a saving of between three and four dollars a thousand feet. Such being the case, it can be authoritatively stated that this system of preparing lumber for prompt and accurate seasoning spells more in increased efficiency than does the band saw over the circular.

Specifically: Both red and sap gum are being steamed in this

apparatus and blown out in a dry kiln to an average weight of less than 3,000 pounds, and loaded for shipment in six days from the saw. The same thicknesses of gum left on the steaming trucks and blown out in the air are reduced to the same or less weight even under bad drying weather conditions within thirty days. Five-eighths inch red and sap gum, after steaming, are blown out in the air, shipping dry, in approximately ten days. The same thickness of plain red oak and quartered white oak, after steaming and exposed only in the air for drying, is being shipped within twenty days from the saw, while one-inch oak is reduced to less than normal weight and shipped within thirty days from sawing. About the same time is employed for reducing sycamore, cypress, birch and maple, and similar woods, to shipping weight. In fact, all varieties of hard and soft woods that have been handled through this preparator system are being successfully prepared for quick and accurate seasoning.

In no instance has there been a failure on the part of a lumber manufacturer to achieve the best possible drying results by the aid of this steaming-under-pressure apparatus. This treatment of lumber not only insures quick seasoning, but accomplishes several other very desirable results. It absolutely prevents case hardening, surface



SHOWING THE LUMBER STEAMING APPARATUS IN USE, WITH LOAD OF LUMBER ON CROSS-OVER TRACK READY TO GO INTO CYLINDER WHEN EMPTY, AND TRANSFER TRACK TO STORAGE YARD.



CORNER OF TRACK STORAGE YARD, SHOWING TRUCKS REMOVED AND PILES TILTED SIDEWISE FOR DRAINAGE AND VENTILATION. LUMBER YARD IN BACKGROUND IN PROCESS OF REMOVAL.

checking and end splitting, and, even with reasonable ventilation, obviates all stain and fungus growth. The process will not eliminate log splits, log stain or shake any more than it will knots and rot, but no additional seasoning defects obtain after the wood is once properly steamed under pressure.

The color and general tone of woods that are rich in tannic acid are somewhat deepened but are rendered uniform. This refers to such woods as red oak, mahogany, sycamore and red gum. The color of light-toned woods remains unchanged, while the beauty of the flake and figure in quarter-sawn stock is materially enhanced. Again, the texture of the wood is vastly improved, as is its milling qualities. Lumber steamed under an approved formula for pressure and time will dry out absolutely straight and flat. This is true even of the most refractory drying woods.

Wood steamed and subsequently seasoned dries out to materially less weight than unsteamed wood, the reductions varying from two hundred to five hundred pounds per thousand feet. In all varieties of lumber, this process materially reduces the shrinkage. Woods that show a shrinkage in drying under ordinary practice of from eight to ten per cent show a shrinkage of only approximately two per cent, and in some instances less than this. Another singular feature is the fact that after wood steamed under pressure is thoroughly dried, there is practically no swelling when exposed to dampness, and likewise there is no subsequent shrinkage. Even the grain does not rise when water stains are employed on it for finishing purposes.

Repeated tests have been made on steam-treated wood to ascertain if there is any impairment in strength, and it has been demonstrated that steaming under moderate pressure and time in nowise impairs the strength or quality.

Users of this apparatus find they are enabled to carry on their usual volume of business on a third or less stock than is usually

held in pile, on account of speedier drying, and in sundry cases manufacturers have been enabled to make sales of lumber which was still in the tree, and deliver it shipping dry within thirty days or less time. Hence it goes without saying there is a manifest economy in interest on investment and in insurance cost. Beyond all that, there is no inconsiderable economy in labor cost, for when the system is operated to its logical conclusion the lumber yard *per se*, with its roof boards, trams and planking, is entirely eliminated.

The lumber, after being piled on an equivalent to dry kiln trucks, is steamed, and then shoved out on to storage tracks, tilted side wise, with a slope of one inch to one and a half inches to the foot, and the trucks removed for using over and over again.

An illustration employed in this connection shows a corner of the storage yard of the Lamb-Fish Lumber Company at Charleston, Miss., which employs this system. The lumber piles in the background are gradually being taken down and the foundations removed to give place for additional storage tracks. Other illustrations show the truck piling system employed by the Lamb-Fish Lumber Company. The counterbalanced gates in the rear of the loads are employed as guides for the accurate placing of piling sticks. Another picture shows a section of the rear of the truck loading spaces, and a portion of the transfer track leading to the preparator. Still another picture is of the preparator itself, in which a truck-load of lumber is being steamed; with another load on the cross-over track ready to go into the cylinder as soon as the load is discharged. At the right of this picture is the transfer track leading down to the storage yard.

In order to properly trade mark lumber steamed under pressure, and make a satisfying appellation for it, it has been decided to call it "Kraetzer-Cured Lumber," following the name of the inventor of the patented apparatus through which lumber is handled for rapid and accurate drying.



German East African Cedar



The East African cedar (*Juniperus procera*-Hochst) is a beautiful large tree from seventy-five to one hundred and twenty-five feet in height with a short, clear trunk, often measuring from two to five feet in diameter four feet above the ground. One writer states that in British East Africa the tree frequently attains a height of two hundred feet and a diameter of six feet. The tree is distributed throughout the mountainous districts of Abyssinia and tropical East Africa. It is very abundant, especially in Usambara, in German East Africa, where it forms the extensive Shume forests. It attains its best development at the base of Mt. Kilmandscharo and Mt. Kenia and up to an elevation of between 4,500 and 9,000 feet. On the north side of Kilmandscharo the tree ascends only about 7,500 feet, but it is very abundant. It is less common around Mt. Kenia, but grows to large sizes up to 7,000 feet. In parts of Usambara, where the tree is called "muangati," it grows at lower elevations, often forming dense isolated forests.

That the wood is of great economical value is best known from what Schimper says in his "Plants of Abyssinia": "It is the most valuable wood in East Africa for a good many purposes; it is used especially for construction material, and contains also an agreeable smelling resin." The wood is fragrant and light, but not strong. Its heart-wood when in contact with the moist earth is almost imperishable, and is much used for water troughs and for walls of houses. A noted traveler and explorer in German East Africa informs us that it is an excellent soft, light wood used for house and bridge building, and since the introduction of steam railroads it is the chief wood sought for crossties. It is used also for cabinet purposes because of its strong fragrant odor, which is said to repel insects.

It has recently been announced that the extensive Shume forests of cedar in German East Africa are now being exploited. This cedar is said to furnish a wood equal in quality to the average grades of the American cedars for making lead pencils, and occurs in sufficiently

large quantities to satisfy the needs of the German factories for a good many years to come, and their dependence on the American product is therefore now almost at an end. The German government had an investigation made of these cedar forests with a view to develop them and to render the timber supply available for use. It did not lose an opportunity to make known this large supply of cedar wood, and a concession has recently been granted to a company for the exploitation of this valuable timber. The company has constructed a cable-tram line at a cost of nearly \$400,000 for the purpose of bringing the cedar logs to the mills. This tram line is now being successfully operated and the cedar logs are converted into lumber and transported by rail to the port of Tanga, in Usambara. From this point it is shipped by the steamers of the East African Line to Hamburg, which is the principal distributing center.

Many government officers have tested the lead pencils made from this East African cedar and have approved them; the Prussian ministries of Finance, and of the Interior both have recommended that pencils made from this wood should be given preference. Practically all the leading German lead-pencil factories are now using some African cedar, and the pencils made from it are pronounced to be equal to those made from the American cedar. A few of the manufacturers qualify such a claim in some particulars, as, for instance, that pencils made of American cedar are sharpened more easily.

How long the supply of red or pencil cedar of this country will last at its present rate of consumption is difficult to say, but it is certain that unless some of the substitutes that have recently been tested will prove satisfactory a few of the mills now in operation will be obliged to import the wood from Africa. Pencil makers in this country have long since been searching for a suitable wood and as soon as the commercial value of this African cedar can be fully established they will doubtless avail themselves of this new source of supply of raw material.

L. L. D.



Low-Grades on a Bull Market



If one were asked to state the leading feature of the hardwood situation of the past two or three years, it is likely that an answer that would come closest to the truth would be the increasingly strong position of the low-grade lumber. Just now, of course, practically every yard is denuded of most of its common and cull lumber, and where there are slow movers it is nearly always in connection with lumber above the No. 1 common grade.

Those familiar with the constant references to the decreasing quality—and increasing cost—of timber in the hardwood producing sections have been prepared, as a theoretical proposition, to demonstrate that prices on low-grade stock are destined to fall, relatively, reasoning in this wise: The proportion of low-grade lumber to the total produced is becoming larger. The demand for good hardwood lumber is certain to be fairly constant. Therefore, with the supply of the latter decreasing and the demand remaining the same, or possibly growing, the value of upper-grade hardwood is certain to rise. On the other hand, with a greater amount of low-grade lumber being manufactured, without any apparently greater outlet than heretofore, the strength of the demand is certain to diminish and prices certain to fall, compared with those of high-grade stock. *Quod erat demonstrandum.*

The theory of the proposition, like a good many other theories, has bumped into at least one solid fact that has knocked a hole in it and left out a good deal of supporting gas. The fact of most consequence is the increasing local consumption of low-grade hardwoods at the point of production. The southern states are the largest producers of hardwood lumber, and at the same time form a section which is experiencing the most rapid industrial development of any in the entire country. This has been accompanied, as every community development is accompanied, with consumption of lumber on a large scale.

One interesting evidence of this fact is shown in eastern Kentucky, where a lot of railroad development work has recently been completed, the result of which has been to increase the production of hardwoods in that territory. But while a large quantity of lumber is being cut, a great deal of it is being used right at the mill, or very close by, in the construction of buildings for coal mining companies. These concerns use millions of feet in building tipples, company offices, houses for miners and other buildings, and are certain to continue to take a large part of the total production of the sawmills in that territory, as the development of the mines and the timber is going forward practically as one operation, both being dependent upon and the result of the creation of transportation facilities.

In territories which are not to be regarded as new, in the same sense as the eastern Kentucky sections where trees have been allowed to stand, because there was no way to get them out either as logs or lumber, industrial development on a large scale is going forward. In Tennessee, for example, a water-power company capitalized at \$20,000,000 has been organized. This is now building two large power plants on rivers in eastern Tennessee and is constructing transmission lines to the principal cities of the state. Smaller companies have begun similar development work on other rivers, and the manufacture of power so cheaply that industrial activity is certain to be encouraged is already an assured fact.

This means a great deal for Tennessee, and it means incidentally a good deal to the lumber interests of the state. With cities growing rapidly all over the state, new factories being built, new homes being constructed for the additional population and consumption of the products of the sawmill going ahead apace, it is certain that a greater proportion of the output of the lumber manufacturers will be used at home.

The Southwest, including Arkansas and western Louisiana, is a large producer of hardwoods and has a greater future supply of hardwood timber, perhaps, than any other part of the southern territory; but like other parts of that section the Southwest is growing rapidly and is maintaining a steadily increasing consumption of lumber.

The completion of the Panama canal is confidently counted on to help every department of business in the South, and while definite proof of this result is as yet not forthcoming, it seems certain that the stimulation which may be expected from such a gigantic improvement as the linking of the oceans will be evidenced in broader and more aggressive business development.

The whole story, then, is that the South, which has been, and at present still is, an agricultural section for the most part, with lumber production the next leading interest, has reached a point where the development of general manufacturing is certain to be an important feature of the situation. The question still remains, however, as to why this expansion along industrial lines should affect low grades more than any other kind of lumber.

In the first place, new development, such as that in the eastern Kentucky coal district, is of the kind which obviously is completed without much attention to finish or ornamentation; utility is the big thing, and the heavy structural end rather than the finish is given chief attention. In other sections, the cutting away of the timber has converted the woodlands into farms, requiring barns, fences and other equipment, all of which is of the sort which takes low-grade material. Another consideration is that the more valuable a commodity is the greater the distance it may profitably be shipped. Hence it is logical that where there is a local market for the millman he is glad to utilize it in the direction of moving low-grade lumber, knowing that he can dispose of his good stuff to buyers at points far removed.

The experience of large lumber concerns throughout the Ohio valley, many of which purchase a large part of the output of small mills in the central South, is that less low-grade stock is being offered than ever before, and that the sawmill men are getting rid of this material in their own localities at as good prices as outside buyers are willing to pay for it. Thus they are undergoing a metamorphosis which is converting them into retailers on their cheaper stock, while they are continuing to dispose of the better grade lumber in larger quantities.

Let it be thought that an obvious feature of the situation is being overlooked, it is worth while to remember that many buyers who formerly thought that they had to have firsts and seconds lumber for their particular purposes have discovered that they can get along very well with No. 1 common and even lower grade lumber. In other words, the higher price of lumber all along the line has caused many to arrange for the use of low grades, thus emphasizing the demand for this character of stock. This is a development along desirable lines, since it strengthens the demand at a point where the greater part of the supply is located.

That there has been a big change in the situation here is indicated by the fact that an executive of one of the large hardwood lumber organizations made a trip to conventions of various consuming manufacturers several years ago, demonstrating to them, by chalk talks and otherwise, that it would pay them to buy more No. 1 and No. 2 common lumber and a smaller amount of firsts and seconds. At that time the preponderance of the demand among manufacturers of case goods was for the higher-grade stuff, almost to the exclusion of the cheaper kinds, and the big problem of the sawmill man was to get rid of his low-grade lumber. Now that consumers are educated to using low-grade hardwoods, however, such a problem is no longer in evidence, especially in view of the other factors affecting the situation, as pointed out above.

The development of dimension stock business was originally put forward as a solution of the low-grade problem of the manufacturer; but, significantly, the improvement in the demand for this kind of stock has resulted in the consumer becoming the leader in the call for dimension lumber, which many sawmill men are no longer desirous of making, under the conditions as to price which now obtain.

"I never saw low-grade hardwood lumber so scarce as it is today," said one of the leading wholesale lumbermen of the Middle West,

who likewise has extensive manufacturing interests. "And I do not regard it as temporary, but rather as the development of a permanent condition. Consumers are using more low-grade stock, while there is less being offered by the smaller producers than ever before. While all kinds of hardwoods have advanced in price, the increased values of low-grades are noteworthy because of the relatively larger

production of this kind of lumber. I have noticed that lumber prices seldom decline greatly, in spite of temporary fluctuations, and therefore I am inclined to believe that the present high prices being paid for common lumber are likely to continue, along with a steady demand, particularly as there is no possible chance for any excess of supply in the near future.



An Analysis of Wood Values



To those who handle lumber as a business without having made a study of its utilization, it is often not clear just what are the properties which, directly or indirectly, lead the artisan to prefer a particular kind of wood for a special purpose. Not infrequently a lumberman handling certain woods will prevail upon a manufacturing consumer to try out a wood as a substitute for the species which he has been accustomed to use, and often with disastrous results to both parties. Woods differ much in both physical and mechanical properties; one may be entirely adapted for a specific purpose and yet another and almost similar species may be totally unfit for the same use. A better knowledge of the properties of woods would be of material assistance to the manufacturer, the distributor and the consumer. The properties of wood which make them desirable or undesirable, as the case may be, for a particular use may be grouped as follows:

- 1—Mechanical properties, such as strength, toughness, stiffness, etc.
- 2—Physical, such as weight, length and character of fiber, and behavior during and after seasoning.
- 3—Chemical, such as color, durability, and value as fuel.
- 4—Structural, such as texture, beauty of pattern, etc.
- 5—Biological, such as form, size, and abundance.

Of the several groups, the mechanical properties naturally take precedence, and of these, toughness and stiffness are unquestionably the most important, so that even the most general classification of woods into "hardwoods" and "not hardwoods" (for this latter class, though by implication the conifers, has so far no name in this country) depends not at all on hardness as the word might suggest, but on toughness, the tough woods being the hardwoods, the others the conifers. Since toughness is a combination of strength in several directions, the various forms of strength should first be considered separately.

When in use, wood usually breaks in bending, as in the case of an axe or fork handle, or else in shearing or splitting, as seen in planks and boards, whether on the sidewalk or in the wagon body. Wood fails much more rarely in compression, though much exposed to this form of strain, and still less frequently in tension, since in this direction its resistance is enormous, and can, in ordinary articles, never be brought to fair trial.

Fundamentally, all strength of wood depends upon four different forms of resistance, namely, the resistance to tension, or lengthwise separation of the fiber; resistance to compression lengthwise; resistance to compression sidewise, or to collapse of fiber, and lateral adhesion of the fibers. Where a stick of wood is tested, none of these forms of resistance can be isolated and tested separately, and in every kind of failure two or more are represented.

Since the strength of the fibers in adhesion is very much less than in tension and compression, adhesion enters into nearly every test as an important factor.

Thus, if a piece of wood consisting of several fibers is tested in tension, the fibers would probably not break at all, but be merely pulled out, the failure, as far as they are concerned, being due to lack of adhesion and not to a lack of tensile strength. Every tension test presents numerous cases of this kind, the broken fibers presenting the even fracture, but being splintered and drawn out, especially if the wood is good.

In the same way when a piece of wood is compressed lengthwise,

some fibers badly situated with regard to the action of the load collapse or else crush into their neighbors, and immediately a breach develops, into which fiber after fiber falls, the breach spreading from this point; and the whole mass of fibers, now no longer adhering in this plane, behave as a great number of separate fine strands—they "buckle," and the piece fails.

Bending is a compound test of compression on the upper (concave) side of the beam and tension on the lower (convex), and numerically stands between these two; that is to say, if a stick breaks in bending, whether it break first on the upper side (in compression) or on the lower side (in tension), the bending strength, as commonly stated, is neither equal to the compression strength nor to the tension strength, but lies between the two. Here, as in the cases cited, adhesion forms one of the factors, since at failure, part of the rupture consists in a separation of fibers.

Shearing along the fiber is simply a test in adhesion, where the force acts in line parallel to the fiber, and the values in shearing wherever tested agree with those of tests in "transverse tension," as the test of adhesion may be termed.

In splitting or cleaving, the case is, like shearing, almost entirely one of transverse tension; with this difference, however, that the force is applied to a small area and acts on a lever (the side of the cleft); it acts, therefore, the more effectively the longer the cleft and the stiffer the wood. From what has preceded, it is evident that the adhesion of the fibers, or better, the resistance to transverse tension, is of great importance. Examining the structure it is quite apparent that this resistance is greatly influenced by the shape and relative position of the fibers. In hardwoods the cells do not arrange themselves in rows; hence, there are no natural cleavage planes (except at the pith rays). A knife passing along a line does not merely separate two layers of fibers; it has to cut through the cells themselves; while if passing through coniferous wood it finds a natural plane of contact between two sheets of fibers, and thus has easy work. Moreover, the course of the fibers in hardwoods is rarely straight, the fibers are generally in oblique positions (best illustrated in elm), they "interlace," and if a piece of wood is split the surface is fuzzy with the myriads of fibers which were not merely separated, but were torn in tension, the very way in which they offer the greatest resistance. For these reasons hardwoods have generally a much greater strength in transverse tension than the conifers. Thus, oak excels hard pine nearly as two to one. Where this greater resistance to transverse tension is accompanied by a greater flexibility, by more "give," as is nearly always the case with hardwoods, the wood becomes tough; a blow may indent, but does not shatter.

This toughness is a combination of relatively great strength in transverse and longitudinal tension together with a fair amount of flexibility or capacity to endure distortion. That toughness varies widely is well known, as is shown in the elm, which excels in toughness, and in the yellow poplar, which possesses but little. Naturally the hardwoods exhibit it to a much greater degree than the conifers. Even a poplar board will bear far longer the constant jar and jolt and wrench which it must endure as a part of a wagon box than a very strong piece of pine or other conifer, and great toughness, such as exists in good hickory, is not possessed by any known coniferous wood.

Hardness in wood means the resistance which any surface, but

particularly the sides (longitudinal faces) offers to the entrance of a blunt body, such as a hammer. The test in hardness is one of transverse compression of the fibers, and therefore depends on their resistance to collapse. In a single fiber this resistance depends on that of the material (presumably alike in all wood), on the shape of the fiber, and the relative thickness of its walls. Fibers like those of hardwoods (fibers proper), with a hexagonal cross section and commonly scarcely any cell lumen or hollow, naturally, behave almost like solid wood substance. They offer great resistance, so that if the outer surface of a stick is formed by such fibers its hardness is very great. If, on the other hand, the surface layer is composed of thin walled vessels or of tracheids, like those of the springwood in conifers, the wood is soft. In the usual test the indentation extends but a short distance ahead of the instrument (as, for instance, when a timber is struck with a hammer); but if the test is continued long enough the compression results in destruction of all the thin walled and much of the thick walled tissue of the wood, so that timbers, such as those sometimes buried in collapsed portions of deep mining shafts, are destroyed throughout. Such a crushed stick continues to resist further crushing, becomes compacted, dense, and heavy, but loses nearly all its bending strength; it takes up water rapidly, and when soaked crumbles like wood in the later stages of decay. Closer examination shows that all thin walled fibers have collapsed just like crushed pasteboard tubes, the break running along two or more lines the length of the fiber, the form of the cross section being changed from a hexagon to an S shape, or an approach to this form.

The hardness of wood in the sense as noted is quite variable, even in wood of the same species, varying on different sides and also according to the portion of the annual ring exposed at the surface, the extent of compression, and other circumstances.

In nearly all wood used for construction, whether a bridge timber, the studding or joists of a house, or merely a table or chair leg, the stiffness of the wood is an essential quality, and in many if not most cases it is far more important than the ultimate strength. Thus, a rafter or joist need not be very strong, but it must bend but little under its assigned load, and even in furniture and smaller objects the piece must not only be sufficiently large to hold up its weight without breaking, but to hold it without being distorted to an unsightly or troublesome degree. In this case ultimate strength is not considered, but stiffness or elasticity rather, and in the majority of cases a "strong wood" is, with the artisan, really a stiff wood. The stiffness of a piece of wood depends upon its weight and on its structure. If a single fiber of pine and one of hickory, both of the same size and thickness of wall, could be tested, they would probably be found alike in stiffness, strength and degree of extensibility, for both are practically alike chemically and physically. The great difference between these woods must therefore be in the combination in which the fibers occur in the wood structure, and it is in this that we find a ready and plausible explanation for differences. An examination of a piece of typical hardwood and a piece of coniferous wood shows that,—

1—The elements of structure are alike in conifers, unlike in hardwood.

2—They are all large (comparatively) in conifers, while in hardwood extremely small elements (fibers proper) form scattered bodies among larger ones (parenchyma) and very large ones (the vessels).

3—These bodies of small fibers, the strongest part of the wood, have extremely thick walls, compared to their size, in the hardwoods, but much less so in the conifers.

4—The fibers in conifers are arranged in perfect rows (or really sheets, for the cells of each row are practically conterminous), those of hardwoods are found in divided bodies, and appear like separate strands of specially strong material. In addition, the fibers (tracheids) in conifers are usually much longer than those in hardwoods. On account of these structural conditions the fibers in the conifer act much more perfectly together and allow less

"give" than the heterogeneous elements and especially the separated strands of fibers in hardwoods, which arrangement permits more "give," and this "give" lessens the stiffness or elasticity of the hardwood. For if we return to our single cell we would have the upper part compressed when the fiber is bent, the lower extended, and the behavior would simply depend on the shape of the fiber and the material of its wall, but if we have a set of fibers and vessels grown together and tested the behavior depends not only on their shape and the material, but also on the relative position of the fibers and other elements. Those which are crooked or oblique on the upper side of the stick will have their unfavorable attitude increased, those on the lower side will merely be straightened or but partly strained, while the main part of the load applied at first is borne by only a part of the fibers, that is, those straightest in their position. Here the large fibers of the conifer with their regularity of arrangement all fall in line at once, they are "straight grain," the "give" is small, and the timber is stiff. Moreover, when the load is removed the case is exactly reversed. The fibers of coniferous wood, all being strained, exert the same power to return, while many of the fibers in the hardwood, on the other hand, are really under but little strain, they make little effort to return, the timber does not "spring back," and thus is neither very stiff nor springy or resilient; it is not very elastic. Thus, it is that conifers are, as far as known at present, generally stiffer than hardwoods of the same weight, the difference often being very considerable. The finer and more even the structure of the hardwood, the straighter the grain, the greater the weight of the wood, and the more perfectly it is seasoned, the stiffer it is. In conifers this quality seems to vary directly with their weight. In hardwoods the matter is too little known to warrant any general statement, though here, too, heavy woods like oak and ash are stiffer than light woods, such as poplar.

PHYSICAL PROPERTIES

Weight is an important indicator of the mechanical qualities of wood and a direct measure of its value as fuel or material for coaling and dry distillation, and often determines the choice of woods for a particular purpose. Thus, panels and other surface lumber in vehicles, threshers, and other movable articles, which should be no heavier than necessary to perform their function, and all lumber for shipping crates and boxes, especially where these must be tight and stiff, are invariably selected from the lightest wood obtainable.

Generally speaking our conifers are lighter than the hardwoods, but there are light and heavy kinds in both.

Shrinking, swelling, warping, and checking are the greatest drawbacks to the use of wood, and are all expressions of the same property of wood material, namely, its hygroscopicity, or capacity to absorb or give off water and thereby change its volume. All the walls of the cells grow thicker if a dry piece is moistened. This increases the size of the cells and thereby the size of the piece. The larger the single cell elements the more rapidly the water can get to or from all parts, and the nearer all cells are alike in size the more nearly they shrink and swell alike.

This explains why pine or other coniferous wood shrinks and swells much more evenly than hardwoods, and also why it is more susceptible to moisture. It also accounts for the fact that the lighter hardwoods give so much less trouble in shrinking and swelling than the heavier ones.

CHEMICAL PROPERTIES

Since the chemical composition of the cell wall of all woods is quite similar, the value of wood as fuel and in dry distillation merely depends on its weight. Of the chemical properties important in construction, it is chiefly durability—resistance to decay and color which enter into the selection of materials, both dependent on chemical combinations. What the substances are which make the heart of cedar and white oak durable and what the processes are which lead to their formation are as yet but little understood. It is certain that these bodies are present only in

very small quantities, but perfectly permeate the cell walls and commonly appear together with more or less sharply marked changes in color.

Generally, trees with durable wood form a distinct heartwood, but their sapwood is no more durable than that of other kinds. Since durability depends mainly on resistance to living organisms, proper experiments to determine the relative durability of woods are exceedingly complicated, and satisfactory results are still wanting. In the absence of better data, the "life" of railway ties as commonly observed will in some measure answer this purpose.

An even color, a darker or lighter shade, are such important elements in the appearance of wood that in all finishing work color is one of the chief considerations in the selection.

STRUCTURAL FEATURES

Besides being intimately related to the mechanical properties the structure also determines the texture and almost entirely the beauty of the wood. Texture may be said to be coarse when large pores, in rows or scattered, appear as holes on the ends or as dark streaks (troughs) on the sides, as in oak and ash; it is moderately coarse if all its elements are large, as in pine, and it is fine if all the elements are small, as in cherry, and much more so in boxwood. Apart from the appearance of the wood, the texture is often in itself a property which fits or unfits the wood for a particular use. Thus, red oak is useless for tight cooperage or for a delicate piece of carving, because in the one case it leaks, in the other its own coarse-texture lines will mar and distort the picture.

Structure is the first element of beauty in wood. Its uniformity

of structure makes white pine monotonous; the striking difference of spring and summerwood renders hard pine obtrusive; the arrangement of vessels, fibers and pith rays characterize oak, and the peculiar arrangement of the same elements gives to elm those handsome figures of dark wavy lines on an even background of brown. Without analyzing or inquiring into their cause, the several patterns have become familiar to all, and the beautiful furniture in oak and maple and cherry and walnut testify to their recognition and importance.

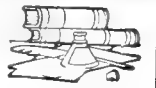
BIOLOGICAL PECULIARITIES

Size, form and abundance of wood more than any other features have influenced the development of our wood-using industries. Man is indebted to a large degree to the large, long shafted, and well formed conifers for assisting him in his progress. Occurring on extensive areas and combining most useful qualities, they are generally sought for structural purposes. If a carpenter were obliged to rely upon beech, birch, chestnut, oak, poplar, etc., and had to use them in combination, house-building would be not only much more difficult and costly, but unsatisfactory. While the stringer and joist of pine would keep straight, its neighbor, the oak, would sag down, the chestnut would warp out of line, the beech and hickory would soon be infested with boring insects, and the whole would be a failure. Abundance in suitable size, form and qualities made white pine the king of American woods for certain purposes and so fully are those properties appreciated in practice that it required a severe struggle to introduce, for instance, such excellent material as cypress as a substitute.

H. S. S.



The Trade Journal



Editor's Note

The following is an address delivered before the Louisville Rotary Club February 10, 1913, by G. D. Crain, Jr.

A song which was heard at a recent meeting of the Rotary Club was, "We're here because we're here." Some of the business men of this country once believed that the trade journals had no better excuse for existence than that; but the trade and technical papers have proven their usefulness, and they are here to stay. Instead of being merely tolerated, they now are welcomed and made use of.

What is a trade journal? It is a paper which is made to interest but one class of readers. Technical papers, such as those for architects, engineers, machinery men, etc., are usually included in the same class, though sometimes the distinction is made that trade journals are for those engaged in the distribution of a given class of goods, while technical papers cater to classes which consume certain products. For example, the Clothier & Furnisher is distinctly a trade journal; while Engineering News would be classified in the technical field.

I believe I am safe in saying that the dominating idea of the present, as far as the commercial world is concerned, is greater efficiency. The problem of doing the thing better, or more quickly, or more cheaply, has been studied at every point, from the factory to the consumer; and the science of management has been evolved from a consideration of the details going into the production of goods or sales in the best possible way.

The trade journal, as I see it, has been more responsible than any other thing for the increased efficiency of the modern business man.

This is of course a broad statement, and yet I believe consideration of the facts will demonstrate its truth. In the first place, it has provided a medium for the discussion of new ideas; and in the second it has developed a lot of them of its own initiative.

Whenever a new plan for improving methods of production or management is evolved, the best place to get a clear, complete and

authoritative statement of it is in the pages of the trade journals covering the fields affected. It will be there—you can count on that. On the other hand, whenever anybody discovers that he has a better system of cost accounting or a better method of handling material than has been used in his line previously, he is quite likely to tell the trade journals about it sooner or later, directly or indirectly.

This leads me to remark upon a peculiar and interesting coincidence, and that is that the live wires of every business are invariably the men who read their trade journals most closely. I do not say that they are live wires because they read trade journals; it may be a cause instead of an effect. But at any rate it is certainly significant that the men who are making the biggest successes are those who are giving close attention to the business papers in their respective fields, and are using them in a way calculated to get out of them all the value that they possess.

The trade journal idea is a good deal like the basic principle back of the Rotary Club, as I understand it. It is the thought of everybody helping everybody else. In the Rotary Club men come together for exchange of ideas and mutual benefit and everybody profits.

In the trade journal, when an ideal condition is realized as it frequently is, members of the business pool their experiences, the sum total being definite and established facts that can be relied upon to help everybody in the business.

If the trade journal is in the news class, perhaps giving members of the trade in which it is interested timely information on the movement of the leading commodities, it has correspondents located in the principal cities, and these furnish a complete and reliable story of the developments of the market up to within a few hours of going to press. Many of these great journals maintain branch offices in the leading centers, with salaried

managers and staffs. A company which publishes several papers in the men's wear field has large offices in New York and Chicago. It keeps a Chicago printing plant working on its papers about all the time, and in addition prints two daily papers in New York. Big organizations like this cost a lot of money. One of the leading trade journals in Chicago spends \$4,000 a week, outside of the actual cost of printing, this including a staff of seventy-five correspondents, eight or ten editorial writers in the main office, and a big road staff used in advertising and special work. Papers of this kind are producing something distinctly worth while.

Most of you would be astonished to learn that there are 738 trade and technical papers and this does not include farm, law, medical journals, which belong in the several categories of class publications. It is an interesting fact that the past ten years have been marked by a great increase in the number and a great improvement in the quality and trade and technical journals of all kinds. The trade paper of the old school, printed originally as a means of conveying market information, did little more than this, filling up a good many pages with polite personals about the various members of the trade. Likewise, such a paper attempted to cover the entire industry, from the origin of the raw material to the consumer. The effect was superficial, disjointed and uncertain.

The typical trade journal of today is radically different. It is chiefly educational in character, and smacks more of the magazine than the newspaper, although in many lines the market or news feature will always be predominant.

It likewise selects, as a rule, but one class of the trade or one section of the country, and cultivates that field intensively, rather than extensively. Thus many papers are made for the manufacturer only or for the retailer only. Many circulate altogether in the Middle West, others take the South, while there are, of course, many which cover the national field, from a standpoint of circulation.

But whatever its plan of production, the twentieth century trade journal has a service to perform, and it performs it. It has something of value to say to its readers, and it usually says it in an interesting and convincing manner. It has the intimate touch, the familiar tone, the vocabulary and the ideas of the man in the business it reaches; it is by, for, and of that business, and consequently it has a value that no merely general publication could ever hope to have.

This, incidentally makes the trade journal reaching a carefully selected class a remarkably productive advertising medium. When the average person thinks of advertising, it is in connection with the newspapers or magazines which are what the experts call consumer publications. Consequently the big national advertising campaigns, which are intended to make the name and characteristics of a product known to the general public, are featured in periodicals of that character. It is a fact that some of the largest and most successful advertising campaigns on record have been conducted almost altogether in the trade publications. The public generally never hears of them, and it is not intended that it should; but they are getting results of a definite, measurable character.

The General Electric Company, which is known as a great national advertiser, is carrying the battle for business into every manufacturing paper of consequence, applying its sales arguments definitely to the products covered by the several publications; the result being that when a brick manufacturer picks up his trade journal, he sees an ad telling about what General Electric motors have done in brick plants; the woodworker or furniture manufacturer hears of them with relation to that use only; textile operators are talked to with reference to their special requirements, and so on. Each argument has an inside aspect which gives it tremendous force.

I believe that the advertising of the future will be largely confined to just such carefully selected mediums. I mean to say not that the general magazines will cease to exist, but that there will be fewer of them, and that they will carry less advertising as the manufacturer finds that he can get the same results at a smaller cost by using the trade journal for distribution and the newspaper

for local sales work, with the technical papers forming the link between the producer and the consumer of products which are not distributed generally, such as machinery.

If I were to be permitted to make one plea on behalf of the trade paper, it is this: Use it. The journal that is published for a special class can not accomplish its purpose unless it numbers among its readers a fair percentage of those in that class. Merely subscribing to such a paper does not end the job. It should be read carefully, from kiver to kiver, as the old dinky said, including the advertising. No one can do this without benefiting by it; and the benefit will be measured exactly by the amount of interest put into the study.

Conditions Abroad During January

LIVERPOOL

The arrivals from North American ports at Liverpool for January were 11,103 tons, as against 6,900 tons in the corresponding month last year. The business of January was rather quiet in comparison with December trade. This condition, however, was anticipated. The average values are high and generally steady. There has been little chartering for ocean transportation done for next season.

The arrivals of oak logs from the United States, included a shipment of 23,000 cubic feet from Mobile. Deliveries have been satisfactory and stocks at present are light with firm values prevailing. There was a moderate importation of wagon planks during the past month and the deliveries have been on a moderate scale. As a subsequence, values of first-class stock of this sort are firm. The stocks of wagon oak planks, including outside depots, amounted to 192,500 cubic feet at the beginning of the present month as against 140,500 cubic feet February 1, 1912.

No import or consumption of elm was noted during the month. The arrivals of ash totaled 6,000 cubic feet during the month and the consumption 3,000 cubic feet. Light stock and firm prices are noted. The supply of ash logs was disposed of readily.

The month closed with an active demand for black walnut logs at very satisfactory prices. The demand for walnut boards and planks has been steady during the month. Good grades of satin walnut (red gum) boards were actively inquired for during January. On the other hand, there was little or no demand for satin walnut logs and little encouragement is held out for shipments in the immediate future.

The demand for yellow poplar logs was steady, particularly for good quality of timber of good size. A moderate inquiry at steady prices prevailed for yellow poplar planks and boards.

January showed an import of 3,000 cubic feet of birch logs into Liverpool. The consumption was 7,000 cubic feet. Stock is but moderate and prices are generally firm. Both import and consumption of birch lumber has been moderate, while stock on hand was sufficient at the end of the month and steady values prevailed. There was a fair inquiry for well manufactured hickory lumber of good grades. Round hickory logs showed a good demand and firm prices during the month.

HAMBURG

According to a report from Hamburg, business during January was rather above the average level for that month. Trade during the first month in the year usually is somewhat restricted on account of inventory taking and because of the fact that river transportation to the interior is often hampered by bad weather conditions. While there is some apprehension that the month of February will before its close bring labor troubles in the furniture manufacturing circles, still the outlook for 1913 is good.

Speaking of the demand for black walnut, the report states that while buyers were prepared to pay higher prices for the best grades, shippers were reluctant to offer such stock.

Fairly large quantities of white oak were sold during the month of January and the demand still continues strong. Red, sap and tupelo gum were in good request during the month. A number of contracts were arranged. While the level of prices in cottonwood prevented business in some quarters, still a considerable number of satisfactory transactions were closed.



Reprints in the Chicago Tribune

Impressions of a Tenderfoot

Second Paper

To people "down East" and Chicago is down East, from the viewpoint of the Inland Empire and the Pacific coast country—the distances encountered in railroad journeys in the great West are appalling. From Chicago to Missoula, Mont., the first principal lumber manufacturing point touched on the journey to the Northwest, is two solid days on a limited express train.

Again, when a man thinks of a night's journey from Portland to San Francisco, for example, he is astounded when he finds that by the de luxe Shasta limited the trip consumes twenty-eight hours. Indeed, it is a deuce of a way between things in the great West.

To the stranger, Missoula, Mont. (and Missoula is a type of hundreds of other small enterprising cities of the West), is surprising in many features. It has none of the wild-and-woolly-West appearance that the Easterner would naturally expect. Both the business structures and the residences are of a substantial and handsome character. The streets are well paved; electric lights and electric light signs are everywhere in evidence; there are good street car service, splendid school buildings and alluring shop windows that are not excelled in any eastern cities of double its size. It almost seems that these westerners go to extremes on the electric light proposition, and perhaps it is the very cheapest thing in the whole country because you find electric lights in profusion everywhere.

These Inland Empire hotels are rather surprising to the wayfarer. Most of them are simply lodging houses, and the guest inquiring for the dining room is told to "go to the left" or "to the right around the corner" where he will find a restaurant. These restaurants vary from the "ride-the-pony" variety like Thompson's Spa at Boston to a fair counterfeit of one of Childs' best that you encounter in New York, Philadelphia and Chicago.

I visited only one of three sawmill operations at Missoula owing to the absence of the principals of the others, and this was one of the three sawmills of the Anaconda Copper Mining Company, presided over by Kenneth Ross. Kenneth Ross is a lumberman and one needs spend but a few hours in going through the Bonner sawmill, its yards, planing mills and door, sash and box factory to be convinced of that fact. It's a big operation, mighty well handled.

While trailing the Northern Pacific I went over to the little town of Ravalli, some eighty or one hundred miles west of Missoula. Ravalli is simply a tank station, but here I encountered a cowboy who was spending his time in negotiating an automobile. It was a six-cylinder Pierce-Arrow—not of the latest type, but it still had four wheels under it and a gasoline tank and an engine, but it was entirely deficient in a hood, and a considerable portion of the upper works were missing. I made a contract with this brigand to take me up through the Flat Head Indian Reservation of Mission Valley, thirty-five miles, to the south end of Flat Head Lake. It was just thirty-five miles, and this cowboy was certainly some chauffeur, because he took me up this valley, uphill and down, over bunch grass and tumbleweed, over about as much semblance to a road as you would find in darkest Africa, in just two hours. It was a nerve-racking trip, and the reasons I had for not jumping

from the vehicle and finishing the journey on foot was that there was a boat to catch at the foot of the lake for Somers, Mont.; and again, I recalled the Jewish story of the sinking ship, about which Abe was putting up such an awful hallabaloo, when his friend Ike observed:

"Abe, what are you kicking about? It ain't your ship, is it?"
It wasn't my automobile.

This Mission Valley, with its quaint Catholic mission houses away up between the mountain ridges, is very picturesque and has, it is said, wonderful eventual agricultural possibilities. The government is now engaged in gigantic reclamation work involving the building of scores of miles of concrete irrigation ditches, and it is going to be a great country some time.

From the foot of Flat Head Lake to Somers, Mont., the journey on a little flat-bottomed steamer, is thirty-one miles. I arrived there at night after an all-day's trip from Missoula, and then went up to the general headquarters of all the sawmill men in this district at Kalispell, twelve miles distant, on a plug road of the Great Northern.

Here I found another tidy little hotel on the lodging house plan, where you go around the corner to get something to eat. Here I also encountered A. E. Boorman, who is a prince in disguise, but incidentally is secretary of the Montana Larch Association. Here I also "met-up" with a half dozen more of the leading lumber operators of the district.

Just a word about Boorman. He takes a stranger to his heart and just quits everything to make life pleasant for him. He knew exactly where I could get pictures of every forest tree that I lacked in my collection, and tramped with me for miles in the forest, and insisted upon toting my fifty pound camera besides. I am going to do my best to secure Boorman a front seat in the alluring place of the Great Beyond.

Kalispell is the center of Montana larch production. Although this district produces sundry other kinds of wood, the so-called larch is the predominant one. Government reports don't say so, but it is alleged there are twenty billion feet of this wood growing in this section, with Kalispell as the center.

The word "larch" does not spell anything to the uninitiated, but in reality larch is western tamarack. But don't let that worry you, because western tamarack is nothing like its eastern namesake. It has a reddish brown bark, is tall but of comparatively small size, and has an average age of perhaps four hundred years. The winter growth is hard, the summer growth a good deal softer. It is relatively a light wood in weight, but has possibilities as a rift-sawed lumber unexcelled by the very finest type of long leaf yellow pine. To my mind it is the softwood flooring that will be the flooring of the future, to take over the bulk of the trade that can't be filled from oak and maple. To achieve the best results it should be rift-sawed, because the flat-sawed stock, owing to its proneness of cleavage between the summer and winter growth, does not produce very desirable results as a lumber product. In fact, little attempt is made to produce this lumber in anything above six

inch widths. However, it is a mighty good wood, and with proper manufacture, seasoning and handling there is a big future for it.

On my way to the great western commercial center of western Washington—Spokane—I made several stops at various sawmills, where I found fir, cedar, larch, white pine and western pine being produced in large quantities. A good many of these western operators are still depending on the uncertain mountain streams for the transportation of their logs, with the result that a good deal of log stain is observable in the product; and again the character of the atmosphere does not contribute to good seasoning, with the result that altogether too much lumber is stained and very indifferently handled.

Again, what may be regarded as extremely wasteful manufacturing methods obtain in nearly all localities. A manifest improvement will surely come about in lumber manufacture and handling methods before any considerable profits can be attained in lumber production. This observation is made advisedly, regardless of the fact that the stumpage cost for timber holdings belonging to these various companies was obtained at a remarkably low price.

Spokane is the commercial center of large lumber manufacturing interests. Surrounding it is a vast empire of timber and agricultural lands. There are several important sawmill plants in the city itself. This is the headquarters of the Western Pine Manufacturers' Association, the secretary of which is A. W. Cooper, a Forest Service graduate, who is as generous with his time and information as Secretary Boorman over at Kalispell. I am deeply indebted to him for a multitude of courtesies, and the pleasure of a conference with more than a score of the leading members of his association.

The lumbermen out there come to association meetings. A little hike of two hundred and fifty to three hundred miles seems to be as nothing to them. They make a trip of this sort with as little thought of effort as a Chicago lumberman would in dropping around the corner for a highball. The lumbermen out in the West work on the "team" plan. They regard anything that is good for the individual lumberman good for the total of the interests. They exchange information and play fair with each other. They are getting there.

At Spokane I stopped at the big hotel bearing the name of the city, and I coaxed Mr. Cooper over to have lunch with me the day after my arrival, and it was here I encountered a surprise. By the merest accident, of course, Cooper and I drifted through the men's cafe on our way to the dining room, and naturally stopped at the bar for an Appolinaris. Mr. Man at the right of us observed to the chemist behind the bar, "Give me a Gibson cocktail." Mr. Man at the left, with equal insistence said, "Give me a Gibson," and inside of a minute there was a fusillade of "Give me a Gibson cocktail," from a dozen sources.

First I regarded this thing as a joke that had been put up on me by either Bolling Arthur Johnson, Leonard Bronson or J. E. Rhodes, but my curiosity was aroused, and so I changed my order to a "Gibson," which resulted in the discovery that a Gibson cocktail under the western classification is simply what is known in the East as an "extra dry Martini,"—one-half a slug of dry gin and an equal amount of French vermouth stirred up over a chunk of ice. I still think that Johnson or someone of the bunch is responsible for this nomenclature, but it is a certainty that I found Gibson cocktails the vogue from Spokane to Seattle, and clear down the length of the Pacific coast to San Diego. It may be possible that they are the vogue in lower California also, but I stopped before crossing the Mexican border, and therefore can't tell for a certainty.

The Spokane hotel is a pretty good bluff of a hotel for any land, but still these people are building a bigger one to supply the demand for additional accommodations, and are proposing to build one that will be an eyeopener.

When you get within a hundred miles of Spokane you will hear the natives and traveling men all talking about the wonderful restaurant of Spokane—Davenport's. Davenport's is regarded as the gastronomic Mecca of western Washington. You are told

of this marvelous eating resort, about its splendid interior, faultless cooking, service, game, and all this sort of thing. As a matter of fact Davenport's is about as garish a joint as you would find on Sixth Avenue in New York, and it is manned by a bunch of expatriated hack drivers disguised as waiters, with a sprinkling of Greek brigands. It is just a pretense for good food, good cooking and good service. It is a monumental bluff of pretense and imitation of first-class metropolitan restaurants. Still, Davenport's is the ultra-fashionable hangout of Spokane.

In theatrical parlance, the Inland Empire country is referred to as the "alfalfa circuit." I think it should be denominated with more appropriateness as the "willow plume circuit." I know I'll get myself disliked for the observation, but the disease known as the willow plume originating in Paris and brought over to New York some five or six years ago, is in its most aggravated form in Spokane and surrounding cities. Women wear substantial, common-sense shoes, and long, parti-hued woolen coats, but ninety per cent of them are addicted to these appallingly big flat hats,—a cross between an umbrella and the roof of a summer house—which are loaded down with masses of feathers. I walked past the open portiers of a dining room in which was being engineered a ladies' tea fight by Spokane's elect womankind one day. I didn't see any ladies—not even the tip of one nose. It was a billowy mass of feathers akin to the foam of the surf at Atlantic City. One night I sat at the theater between two of these appalling headgears, the rims of which lapped at least a foot across my knees, when the center sections were held on the laps of the ladies at my right and left.

I had the pleasure of a very delightful visit at several of the big mills at Sand Point, Idaho, and vicinity. I made one stop at North Yakima, Wash., about midway between Spokane and Seattle. North Yakima is another typical, well-ordered little city, in the center of the great apple-growing region. There is one big sawmill plant there, that of the Cascade Lumber Company, a modern and up-to-date plant manufacturing quite largely what is known as western pine. However, the name "western pine" doesn't spell anything to the uninitiated. "Western pine" is *Pinus ponderosa*, the yellow pine of the West masquerading under various names in various sections. It is a growth which starts in just north of the city of Mexico, and in various qualities extends clear to the arctic circle, and also has a considerable growth in California. In Mexico it is known as Mexican white pine; in Arizona as Arizona pine; in New Mexico as New Mexico pine; in the Inland Empire as western pine, and in California as California white pine. Depending on soil and latitude, it varies considerable in quality, but the sapwood makes a most excellent imitation of white pine, and is used as a substitute both locally and through the entire East in the manufacture of doors, sash and interior finish.

I am indebted to A. H. Huebner, of North Yakima, manager of the Cascade Lumber Company, not only for a pleasant visit at his big plant, but also for sundry specimens of the apple orchard product of that region, which I buried most religiously in my grip and ate one apple a week through the remainder of my journey, and finally succeeded in getting one monster specimen back to deliver to my wife in Chicago. The Cascade Lumber Company's plant is a good one and very well handled, and while perhaps it negotiates its drying problem of western pine as well as the best, there is still improvement that should be made.

Don't forget for a minute that there are boomers in the land in the Inland Empire. They are just as numerous and busy as further westward. Talk about the living embodiment of the circus poster—they're it.

The California land barker, pestiferous as he is, is a babe-in-the-woods beside some of these Inland Empire fellows—and don't forget that the former is no slouch.

Then I went to Seattle, where Proctor Knox's alluring forensic story of Duluth is duplicated. But as Kipling says, this is another story.

H. H. GIBSON.



Meeting of Box Manufacturers



The National Association of Box Manufacturers met in the fourteenth annual convention at the Hotel La Salle, Chicago, February 19 to 21 inclusive. There was an attendance of approximately one hundred box manufacturers. Unusually close attention was paid to the addresses and discussions occurring in each session and all the sessions were marked by a large attendance.

The opening session of the first day was introduced by F. M. West, president. Mr. West gave a short talk and then introduced L. E. McGann, commissioner of public works of Chicago, who delivered an address of welcome representing Mayor Harrison.

Following a short talk by B. F. Masters, President West delivered his annual address, in which he gave a general resumé of the year's work. He spoke encouragingly of what had transpired during the last twelve months and of future prospects.

Following the report of the treasurer, which showed the finances of the association to be in good condition, Secretary E. H. Defebaugh gave his annual report. He further reviewed the work of the past year and told of the possible benefits from attendance at the conventions, pointing out particularly the good that can come from co-operative action on the part of the members, which can be secured only by getting together. One of the most pertinent proofs of the efficiency of association work, according to the secretary, is the satisfactory prices being realized for boxes. Without the knowledge of general conditions which every member secures from association attendance, such uniformity of prices could not be maintained. In speaking of the matter of substitution of fibre boxes for wooden boxes, Secretary Defebaugh said that the number of claims in the railroad claim offices is incontrovertible evidence that for long hauls the fibre container is inadequate. According to the speaker, it is necessary to convince the wholesale consumer that he reaps an advantage from goods shipped in wooden containers as against goods shipped in fibre containers and that with this advantage he can afford to charge additionally for the goods received packed in wooden boxes. The secretary stated that this persuasion is a matter of salesmanship and that salesmen should be instructed to make every effort possible to convince the wholesale consumer that he is getting better value for goods received in sound condition and that he should be willing to pay a slightly increased price.

H. B. Maxwell, association manager, reported on the accomplishments of the association during his term of office. He spoke particularly of proceedings in the R. W. Pridham case. This case, it will be remembered, was with the idea of securing the same classification on goods packed in fibre packages shipped to the East as at present prevails on similar goods shipped to the West.

The nominating committee submitted the following names as its recommendations for officers for the coming year:

PRESIDENT: W. D. Sexton, Cincinnati, O.
FIRST VICE-PRESIDENT: W. F. Brown, Jersey City, N. J.
SECOND VICE-PRESIDENT: F. S. Blodgett, St. Paul, Minn.
THIRD VICE-PRESIDENT: J. W. Jarboe, St. Louis, Mo.
SECRETARY: E. H. Defebaugh, Chicago, Ill.
DIRECTORS: Bert Hanna, G. L. Crosmann, John A. Cook, W. L. Russell, T. H. Ellenberger, H. E. Montgomery, E. E. Fair.

The committee on uniform cost system reported through its chairman, B. F. Masters. The report was followed by considerable discussion and it was finally moved that discussions be continued at the next meeting of the association. This would give the members ample opportunity to digest the contents of the committee's report and to form their opinions.

At the Thursday session R. S. Kellogg, secretary of the Northern Hardwood and Hemlock Manufacturers' Association, gave a talk showing the connection between the hardwood lumber industry and the manufacture of boxes. Mr. Kellogg assured the members that there is no immediate prospect of there being any immediate break in the price of box lumber. His statement in this particular was received philosophically by the members of the association and a discussion of the question established the fact that the con-

sensus of opinion of the members is that an increase in the price of boxes is the only solution of the problem. In fact, there was considerable evidence in the discussions which would indicate that box manufacturers are now getting considerable increase in price for their product. Several members expressed themselves as believing that even with the increased price of box lumber their plants will return a satisfactory profit during the coming year. Other men prominently connected with the lumber business who gave their views on this same question were F. E. Parker, president of the National Wholesale Lumber Dealers' Association, J. E. Rhodes, secretary of the National Lumber Manufacturers' Association, and J. M. Goodwillie, prominent box manufacturer of Chicago.

The committee on uniform classification then reported through its chairman, J. E. Williams. In conjunction with this report was a report of the committee on standardization of the wooden box. The reports and following discussions treated fully of the question of the superiority of the wooden box as a shipping container. A most important phase of the discussion was that having to do with the possibilities of the railroads and the box interests working out a standard for boxes which would result in the continued acceptance of the wooden container as the superior of all shipping containers.

Harry A. Wheeler of Chicago, president of the Chamber of Commerce of the United States, spoke enthusiastically to the attendance of the possibilities of the association be represented. Mr. Wheeler outlined what has been done by the National Chamber of Commerce, told what it is now trying to do and of the future possibilities. He spoke of the increased benefit which would result from increased and continued support on the part of the business men throughout the country through increased membership.

C. W. Price, representing the Industrial Commission of Wisconsin, gave an interesting and instructive talk on the prevention of industrial accidents. He analyzed the causes for the usual class of accidents occurring in industrial plants and pointed out practical methods of preventing such catastrophes. Mr. Price had arranged with the visiting delegates at the convention to visit the headquarters of the Lumbermen's Club of Chicago, where there is on exhibition a complete line of accident preventing appliances. The exhibit contains photographs of every known practical device for the prevention of accidents which can be applied to woodworking machinery of any kind. These photographs were taken from appliances now in successful operation and represent practical ideas rather than merely the theory of accident prevention. The photographs are supplemented by working models of the devices wherever it was possible to exhibit them.

The session Friday, February 21, was mainly executive in character. Following the executive discussions the committee on officers' reports reported. These reports were adopted. The committee on resolutions submitted resolutions on the deaths of the following: Frank Halleck of the W. S. Doig Estate, Brooklyn, N. Y.; Mrs. Henry Stevens, wife of Henry Stevens, formerly manager of the box association; R. B. Dyer, president of the Northwestern Association of Box Manufacturers; W. F. Goessling, St. Louis, Mo.; Edward Germain of Saginaw, Mich. The committee also recommended that votes of thanks be extended to the hotel, to the members of the Chicago trade entertaining the visiting delegates, to the speakers, the officers and the Wisconsin Industrial Commission.

The election of officers followed, the recommendations of the nominating committee being adopted.

The entertainment included luncheon for the ladies at the South Shore Country Club Thursday noon. The ladies also attended a dinner and theatre party Thursday evening. At the same time the men were enjoying a banquet and entertainment in the roof garden of the La Salle hotel.

The Mail Bag

Any reader of **HARDWOOD RECORD** desiring to communicate with any of the inquirers listed in this section can have the addresses on written request to the Mail Bag Department, **HARDWOOD RECORD**, 537 South Dearborn Street, Chicago, and referring to the number at the head of each letter and enclosing a self-addressed stamped envelope.

B 398—Bleaching Wood

Saginaw, Mich., Feb. 14. Editor **HARDWOOD RECORD**: We are referred to you by Harry D. Tieman, in charge of the Forest Products Laboratory at Madison, Wis., to whom we had directed an inquiry with regard to bleaching wood.

We have met with a process of bleaching hardwood that removes all sap and stain and natural color, leaving it a pure white. We are under the impression that this is not a new process and we would like to have you advise if you have met with any literature or advertising on the subject.

The above concern has been advised that the only process that we know anything about for bleaching wood is involved in that which is known as the sulphur fume process. Sections of light colored lumber or veneer can be suspended on wires by means of clothespins or their equivalent in a tight box and by sifting a handful of sulphur over live coals in an iron pan or kettle, the surface of woods like maple can be bleached to a very white tone.

Mr. Tieman probably had in mind the Kraetzer process of steaming wood under pressure to contribute to its quick and accurate seasoning. This process simply tends to make the color and tone of wood more uniform, but does not change the color of woods that contain no tannic acid. Woods that are rich in tannic acid, like red gum, red oak, sycamore and mahogany, are materially darkened by this process; and it is possible by treating wood in steam under pressure for a considerable period to render white oak, for example, rich brown in color, and carried far enough, will vulcanize the wood.—EDITOR.

B 399—A Correction

Port Barre, La., Feb. 15.—Editor **HARDWOOD RECORD**: The copy of your issue of February 10 received. The article you published in regard to The St. Landry Realty Company is correct in every particular with the exception that it has not purchased any timberlands from the Port Barre Lumber Company. Its timber lies in a different section of the country altogether.

This is rather doing an injustice to the Port Barre Lumber Company, and will ask you to kindly correct it in your next issue and oblige.

THE ST. LANDRY REALTY COMPANY.

B 400—Wants Butternut

Rock Falls, Ill., Feb. 13.—Editor **HARDWOOD RECORD**: Cartier-Holland Lumber Company, Ludington, Mich., suggests that you could likely advise me as to any firms manufacturing butternut. I want a carload of 4/4 and 6/4 firsts and seconds and No. 1 common, on grade. If you can give me any information on this line would appreciate the favor.

The above inquirer has been supplied with a brief list of manufacturers of this wood, who possibly will be able to supply it.—EDITOR.

B 401—Percentage of Moisture in Kiln-Dried Oak

Jackson, Mich., Feb. 10.—Editor **HARDWOOD RECORD**: Will you advise me what is the percentage of moisture left in oak after it has been through the average kiln? This question was asked me by a varnish man.

The above correspondent has been informed that oak which has passed through an ordinary dry kiln retains probably more than five per cent of its weight in water. Capillary attraction in the wood is so strong that no heat short of burning will compel it to give up all of its moisture.

Air-drying in a room of ordinary temperature, no matter how long continued, still leaves in the wood enough water to weigh from eight to ten per cent as much as the wood.—EDITOR.

B 402—In the Market for Elm

Chattanooga, Tenn., Feb. 5, 1913.—Editor **HARDWOOD RECORD**: We are in the market for two or three carloads No. 1 common and better, elm, 15", 16" and 17" wide, thoroughly dry. Can you advise where this stock can be had?

A list of manufacturers of southern elm has been forwarded to the Chattanooga inquirer.—EDITOR.

B 403—Evidences of Interest

As proof that it pays to take time to read a legitimate trade paper, **HARDWOOD RECORD** submits the three appended communications coming respectively from a manufacturer of beds, a prominent wholesaler in the East, and a manufacturer of shuttle blocks. These men found in the last issue of **HARDWOOD RECORD** ideas which appealed to them as being practically valuable in connection with their business.—EDITOR.

New York, N. Y., Feb. 14.—Editor **HARDWOOD RECORD**: In the last issue there was an article entitled "New Zealand Hardwoods Might Prove Satisfactory in America." We desire further information and would like to know to whom to write for the same. We should like to get the names of the woods which compare nearest to hard or rock maple, beech and birch and rock elm. We would then want to import a sample lot.

—COT BED COMPANY, INC.

Philadelphia, Pa., Feb. 15.—Editor **HARDWOOD RECORD**: I find in your issue of Feb. 10 an article on page 34 entitled "Personality in Salesmanship." This is one of the best articles that I have ever read and if all the lumbermen would read the same, I know that they would be greatly benefited.

The lumber business today is more or less like a race-track, one salesman merely trying to go faster than the other, without really considering the actual outcome of his labor. In other words, it seems to be a case more of volume than of profit and, while I believe that competition is the life of trade in many instances, competition is the death of trade as explained.

I also must admit that the personality of a salesman is a great factor, but that personality must be his integrity and truthfulness and fair dealing with his customers. It is not the number of salesmen that are on the road that counts, but the success of a business depends upon the character of its representatives whose aim should be to make a fair margin for those they represent. Such men are hard to get as frequently such men consider themselves capable of going into business for themselves.

As stated above, I wish it were possible for every lumberman to read this valuable article.

—LUMBER COMPANY.

Greensboro, N. C., Feb. 15.—Editor **HARDWOOD RECORD**: Your article on page 34b, Feb. 10 issue, entitled "Useless Hardwoods Will Have Value," was very interesting. The gum you spoke of has been tried by the writer for shuttle manufacture and it was found that it will warp and check. As to the other woods you mention, it will be interesting to note how they will perform in service. My idea would be that the quebracho would answer very well. Can you advise me where I can get a sample of the wood?

B 404—In the Market for Beech

New York, N. Y., Feb. 15.—Editor **HARDWOOD RECORD**: We are in the market for some 5/8" No. 1 common and firsts and seconds beech and if you can put us in touch with some mill who can furnish same, we will appreciate your attention.

—LUMBER COMPANY.

While it is recognized that this is a particularly hard item to secure under ordinary conditions, and especially hard under present conditions of stock, it may be possible for this concern to fill its requirements. It has been given a list of possible producers of this grade of stock.—EDITOR.

B 405—Wants Three and Five-Ply Panel Stock

Chicago, Feb. 18.—Editor **HARDWOOD RECORD**: Please put our name on your bulletin service as we are in the market for three and fiveply panel stock in beech, oak and mahogany and also for 1/8" oak and birch door stock. Kindly see if you can not find some firms who can supply us with the above stock.

—VENEER AND PANEL WORKS.

B 406—Wants Stock for Packing Cases

New York, N. Y., Feb. 22.—Editor **HARDWOOD RECORD**: Can any of your readers quote on, or inform me where I may obtain, a considerable quantity of any kind of softwood, sound knotted stock suitable for packing cases, 5/8" or 9/16" thick, 5 to 10" wide, some 3 and 4" taken, 5 to 10' long, bundled and marked for export, giving price delivered at nearest port? Can use three to four cars monthly. This is a steady business throughout the year. May be resawed stock. Must be wood grown in this country.

The above inquirer has been supplied with a list of several manufacturers of crating lumber.—EDITOR.

A prominent railroad in New England is re-trying the experiment of preserving cross-ties by boring a hole through the middle and filling with oil which can be renewed from time to time. The hole in each is an inch and a half in diameter and extends to within six inches of one end of the tie, the open end being plugged after the oil is put in.

News Miscellany

Coming Annual of the National Wholesalers

All reports indicate that the annual meeting of the National Wholesale Lumber Dealers' Association, to be held at Atlantic City on Thursday and Friday, March 6 and 7, will be one of the largest conventions ever held by that association. Arrangements are being made by members in several cities to engage special cars, and it is very evident that the decision of the trustees to hold the meeting this year at Atlantic City meets with the very hearty approval of the association members.

Arrangements at the Hotel Chelsea, which is to be the headquarters of the association during the meeting, are the most complete ever made for a convention. The floor plans of the hotel are such that the meetings can be conducted on a very convenient and expeditious basis, the convention hall being on the first floor right off the lobby, while the various committee rooms, smoking room, etc., provide a most suitable meeting place. The executive committee is working out a program for the convention and the banquet which is to be held on Friday evening, March 7. Speakers of prominence will attend the banquet. The replies from manufacturing, wholesale and retail associations show that the association and delegate attendance will be unusually large. The ladies will also participate in the banquet.

Several important subjects will be considered at the business meeting and the combination of business and social arrangements is one that will be unusually pleasing to the members and delegates.

Forestry Matters in North Carolina

The third annual meeting of the North Carolina Forestry Association, at its meeting in January, passed resolutions by which it declared its attitude on several important matters of policy.

The state was urged to co-operate with the federal government in protecting the forests on the headwaters of the principal rivers.

The movement to turn over government timberlands to the state in which they are situated was strongly disapproved, and members of the United States Senate and House of Representatives were asked to use their best efforts to defeat it.

Better means were advocated for the protection of the forests in the state against fire, and an increase in the appropriation was asked for that purpose.

The time-honored custom in the South of ranging stock in the woods is severely criticized. "Hogs and cattle," it is declared in the report, "are preventing the reforesting with longleaf pine of vast areas of cut-over forest land in the eastern half of North Carolina." The association recommended a stock law that would put a stop to the unrestricted ranging of cattle and hogs.

The movement for establishing a chair of forestry in the State University was endorsed by the association.

Activities of Memphis Lumbermen

Red gum will be used as the interior finish in the new Chisca hotel, which is being erected here and which is to be one of the largest structures of the kind in the city. The management first decided on birch, but as a result of the activity of the special committee appointed by the Lumbermen's Club the specifications have been changed from birch to red gum. The latter is to be quarter-sawn and is to be used in its natural color, with the result that it is expected that it will prove quite an advertisement of the beauty and utility of this lumber. The special committee, of which F. B. Robertson is chairman, made its report at the meeting of the Lumbermen's Club, held at the Hotel Gayoso, Feb. 15, and the success of the work of this committee was the source of much gratification to the members, particularly to those who are prominently identified with red gum, either through ownership of gum timber or through operation of plants manufacturing this lumber. It was necessary for the club to agree that the management of the hotel should not experience any loss as a result of the change in the specifications, and this was done. It is not known what the difference in cost will be, but the club is sending a representative to Oshkosh, Wis., to go over the matter with the firm at that point which had the original contract specifying birch. There is a vast amount of gum timber in the Memphis territory and the success of the committee in this instance is accepted by members of the trade here as one of the most important steps taken in the educational work being done in behalf of that particular wood.

The law and insurance committee, through James E. Stark, reported that further investigation had disclosed the fact that fire insurance rates on lumber in Memphis were not only higher than at points north of the Ohio river but that they were higher than those at Nashville and St. Louis. Mr. Stark has gone very thoroughly into this matter, and the further he goes the more convinced he is that rates here are entirely out of line and that they are so excessive that a decided adjustment is necessary. He and the members of his committee held a conference during the past week with a representative of the Tennessee Inspection Bureau but, while a number of propositions were made, none was satisfactory. Mr. Stark had a vast array of figures which he submitted to the club bearing out his contention that rates here are not only too high but that they are distinctly out of line with those on similar risks

at other points. Mr. Stark also introduced to the club a gentleman who has been identified with insurance matters and who declared it to be his opinion that the insurance companies could make substantially lower rates at Memphis and still get away with a good profit. The committee will continue its efforts to secure lower rates, and indications are that the matter will be handled so vigorously that something definite in the way of results will be obtained.

The river and rail committee called the attention of the club, through John W. McClure, to the fact that the Illinois Central Railroad Company had agreed to temporarily withdraw the proposed increase of two cents per hundred pounds on shipments of cottonwood and gum from Vicksburg, Cedar Point and one other station in Mississippi to Memphis. This withdrawal is effective until May 1, when the Illinois Central proposes to put in increased tariffs on all hardwood shipments of lumber from points in Louisiana, Arkansas and Mississippi to Memphis. Mr. McClure states that the shippers of hardwood lumber were represented at the hearing before Special Examiner Elder of the Interstate Commerce Commission Feb. 13, at which time the Illinois Central made this announcement, by J. H. Townsend, manager of the Southern Hardwood Traffic Bureau, and J. R. Walker, special attorney for that organization. The hardwood men did not attend and did not give any testimony because this hearing, it was stated, dealt almost altogether with pine.

The club, on recommendation of the river and rail committee, instructed the secretary to request the Tennessee senators at Washington to support the confirmation of the reappointment of Mr. Clark of the Interstate Commerce Commission.

Among the guests at this meeting was Special Examiner Elder of the Interstate Commerce Commission. Mr. Elder addressed the club and said that, while this was his first visit South, he was very favorably impressed with Memphis. He complimented the lumbermen in particular upon the good feeling which existed among them and which enabled them to combine themselves into such a formidable organization for the protection of their mutual interests. By virtue of his connection with the commission Mr. Elder has had an excellent opportunity to witness the results which have followed the organized efforts of the lumbermen of this section in connection with rate and other problems.

This meeting was well attended and was of particular interest, owing to the number of subjects which came up for discussion. The attendance was large. The usual luncheon was served.

Philadelphia Exchange in Monthly Meeting

The Lumbermen's Exchange held its regular monthly meeting on Feb. 6, President William T. Betts in the chair. After the usual luncheon, a regalement of another sort but of equal relish was furnished by Owen M. Bruner, president of the Philadelphia Wholesale Lumber Dealers' Association who has recently made a trip to the Panama canal, of which he made a thorough inspection, and of which wonderful construction he is well equipped to give an entertaining description and to expatiate exhaustively upon its wonderful advantages to a universal traffic. He illustrated this great work by the aid of moving pictures. This was a treat for which those present feel much indebted to Mr. Bruner. Views of some of the immense lumber camps and timber tracts in Idaho and Washington, and of other interesting Pacific plants were also given. By a neat little trick of Mr. Bruner, as a closing view, President William T. Betts and George A. Howes, appeared in bold relief on the sheet to the excessive mirth of the audience.

At this meeting J. E. Troth, in behalf of Ralph Sonder, chairman of the committee on legislation, submitted a report in which the committee recommends that the exchange endorse the bill asking for the repeal of the mercantile tax, which request was made by the joint committee on repeal of mercantile tax, Pittsburgh. The exchange concluded to do this. It also endorses the endorsement of the Alter bill, in the Pennsylvania General Assembly, in Harrisburg, against fraudulent advertising, notifying the Pittsburgh Publicity Association to that effect. A bill in the House of Representatives, Washington, for the purchase of a site on which to begin the construction of a new custom house in the city of Philadelphia was in resolution endorsed by the exchange at this meeting. The American Academy of Political and Social Science, Philadelphia, sent a request that delegates to represent the exchange be sent to the Seventeenth annual meeting, to be held on April 4 and 5. The six sessions of this annual meeting will be devoted to "The cost of living in the United States." President Betts, was instructed to appoint delegates.

Timber Purchase

J. C. Turner, the well-known cypress man of New York, has just purchased 24,000 acres of cypress and tupelo gum timber near Mobile, Ala., from the Mobile Timber Company. The tract cruises about 350,000,000 feet. Mr. Turner expects to begin to operate this timber sometime during 1914. This is only one of the many enterprises in the Gulf coast region in which Mr. Turner is interested.

February Edition Red Book

The Lumbermen's Credit Association, Transportation building, Chicago, publisher of the Red Book, has delivered to its subscribers the February edition giving ratings and financial standing of lumber concerns throughout the United States and several provinces of Canada. This concern, of which William Clancy is the head, has been in business since 1876, and aside from printing the Red Book and issuing reports on the lumber trade, it also has a law and collection department.

Meeting of St. Louis Lumbermen's Exchange

The Southwestern rate case was the principal topic touched on at the first meeting and dinner of the Lumbermen's Exchange, under the administration of the newly elected president, F. H. Smith, which took place at the Mercantile Club, on Friday evening, Feb. 7. There was a good attendance.

President F. H. Smith, called the business meeting to order and asked Charles E. Thomas, chairman of the traffic committee to report on freight rate matters. Mr. Thomas spoke of the proposed advances from the Southwest, telling how comprehensive they were, how the contemplated changes have caused the lumber interests of Cairo, Memphis, and other cities, as well as the Lumbermen's Club to take action. He stated that the advances were a far reaching scheme for other rate advances from the South. He also mentioned that most of the money necessary for the expenses in presenting the case to the Interstate Commerce Commission, had been raised or pledged.

Harold Small, an attorney, who has been retained to conduct the rate advance case before the Commission, then discussed the various phases of the freight rate situation.

H. A. Boeckeler, Thos E. Powe, G. H. Cottrell and Geo. E. Hibbard also spoke on the subject.

George E. W. Luehrmann, chairman of the fire insurance committee although not at the meeting, sent word that considerable progress had been made by his committee and a report would be handed in at the next meeting.

National Inspection for January

The January statement of inspection issued by the secretary of the National Hardwood Lumber Association shows that during that month 13,599,434 feet of hardwoods were inspected under the bonded certificate. This is an increase of 3,818,603 feet over January, 1912, and was accomplished at an expense of \$191.94 in excess of inspection fees earned. Floods and unfavorable weather conditions at many southern points materially reduced the volume of work.

Since the letter of Jan. 17, five new applications for membership were received, which makes the total since the convention of last June, ninety-five.

The sixteenth annual convention will be held in Chicago June 5 and 6 at the Hotel Sherman. The attention of all members is directed to section 2, article IX, of the by-laws. During the coming month, the recommendations of the inspections rules committee which will be voted upon at the convention on June 6 will be printed and a copy sent to every member. Proposed changes in the inspection rules must be sent to Chairman J. M. Pritchard, Memphis, Tenn., prior to March 5.

R. L. Dooley has been appointed as assistant to inspector H. H. Roberts at Huntington, W. Va., and I. O. Burdette succeeds O. L. Faust as assistant deputy inspector at Memphis.

Biltmore Doings for January

Jan. 2 brought the students of the Biltmore Forest School together at Darmstadt in Germany after the Christmas holidays. The students spent the entire month in Darmstadt.

During January a number of short trips were taken to the forests and wood utilizing establishments in the immediate vicinity of the school's headquarters. The students were enabled to study and observe the gradual increase in the intensity of forest management as it developed with the gradual welding together of the many small principalities which eventually, in 1871, formed the German empire as we know it today.

On Jan. 6 the students paid a memorable visit to old Heidelberg and while there visited the communal forests under the guidance of the supervising forester. Here were encountered some fine stands of chestnut grown from natural seed regeneration on steep hillsides. Chestnut here suffers from wind-shake and is utilized chiefly for its tannic acid and for staves of brandy barrels.

The Balkan war has influenced forestry even in Heidelberg, for the supervising forester is selling the box board quality of pine to be used for ammunition boxes at a price of thirty dollars per cord.

A visit to Mannheim, the terminus of the commercially navigable Rhine, was made particularly pleasant by members of a local firm of timber merchants. Most of the lumber imported comes from Sweden, Norway and Finland, with the United States a poor fourth. This situation will undoubtedly be changed with the opening of the Panama canal. The principal lumber imported from the United States is longleaf pine. Douglas fir is imported to some extent, but there is a prejudice against it, the trade saying that it is too soft for flooring, for which purpose it is chiefly used.

The students made a trip to the plant of the leading German manufacturer of woodworking machinery. Here the points of difference be-

tween American and German woodworking machines were pointed out and explained. The German machine is, generally speaking, more solidly built, and usually has to accomplish a variety of purposes. Among the recent inventions of this firm is a planer which planes the inside of a finished barrel so as to prevent the spoilage of the liquids due to microbes and fungi harbored on the uneven surfaces. A slack stave machine will finish at one operation, from lumber of uneven widths, 20,000 staves a day.

The students have been busy during their days spent at Darmstadt in lumber inspection on yellow poplar, cypress, cottonwood, gum, oak, hickory, sycamore and maple. The school had a considerable quantity of American lumber shipped to it by a large American manufacturer.

Opens Wholesale Office at Cleveland

George N. Comfort, formerly secretary of the Central Lumber Company of Cleveland, O., recently resigned his position with that concern after having been with it for six years, and disposed of his interest in order to enter the wholesale lumber business on his own account. Mr. Comfort has opened offices at 568-70 Rockefeller building, Cleveland. While he will do a general wholesale business, he expects to specialize in northern hardwoods, white pine and other northern woods.

Mr. Comfort started in the lumber business in 1900, being employed at that time by F. W. Gilchrist at Alpena, Mich. Shortly afterwards, he was transferred to Cleveland, taking charge of the company's wholesale pine and hardwood yard operated at Cleveland under the style of F. R. Gilchrist & Co. He was with this company until it sold out, then took a position with the Robert H. Jenks Lumber Company, being department manager for this concern for three years. At the end of that period, the Central Lumber Company was organized and Mr. Comfort was elected secretary. He resigned that position on Feb. 1. Mr. Comfort will operate under his own name.

Switching Controversy in Baltimore

Switching charges, for a long time one of the troublesome questions for Baltimore shippers, are once more engaging the attention of those firms and corporations who receive or send out freight in carload lots. Some time ago the matter was taken before the Interstate Commerce Commission on the plea that the charges made by the Baltimore railroads were altogether out of proportion to the value of the services rendered, and greatly in excess of the rates exacted for a similar service in other cities, thereby putting the Baltimore merchants and manufacturers at a serious disadvantage as compared with their competitors in other cities. The Interstate Commerce Commission, after a hearing, granted partial relief, it having been shown that while the charges were relatively low for switching from one point on a railroad to another point on the same road, they increased disproportionately where the switching was from a point on one road to a point on another road. In some instances the charge for switching a car within the city limits amounted to one-half the freight rate from Baltimore to Pittsburgh. The order of the Interstate Commerce Commission did not go far enough, in the opinion of the shippers, and they appealed to the Maryland Public Service Commission, which, after another hearing, issued still further regulations, wherein the contentions of the shippers were practically sustained. Now the railroads have appealed to the courts for an order to vacate the decree of the Public Service Commission, and the case has been up for a hearing in the Circuit Court here for the last two days. The railroads maintain that the order of the State Commission is unfair to them, that they have expended much time and effort to the end of being first on the ground in the matter of terminal facilities, and that they should not be required to afford the use of these facilities to newer roads. Under the order of the commission, the switching charges were reduced to \$1 a car for ordinary yard switching, and proportionate amounts up to \$7.50 for a more complicated service. The members of the lumber trade here are greatly interested in the outcome of the case, since they are among the shippers who frequently have cars transferred from one point to another in the city, to meet the special requirements of their trade, and they have in times past been compelled not infrequently to sacrifice a large part of the profits by the payment of switching charges, which they considered exorbitant.

Forestry Students on Utilization Trip

The senior class in forestry of the Pennsylvania State College has just completed a forestry utilization trip in north central Pennsylvania, under the direction of Professor R. R. Chaffee. A very interesting visit was paid to the state nurseries in Tioga county. The students also visited various industrial plants, including a basket plant, a hardwood distillation plant, a chemical wood products plant, a tannery and a stave plant.



GEORGE N. COMFORT, CLEVELAND, O.

Special trips were made to the woods operations of the Emporium Lumber Company and of the Central Pennsylvania Lumber Company, where the students were allowed to make a complete study of the hard wood and hemlock timber and the logging and milling operations in the central Pennsylvania region. During the stay at Galeton, the students were privileged to listen to lectures by U. B. Russell on the "History of Lumbering in Northern Pennsylvania," by F. P. Sykes, woods superintendent of the Emporium Lumber Company, who talked on "Portable Slides and Their Economic Features," and by W. W. Lowell, mill superintendent of the Central Pennsylvania Lumber Company.

On the return trip, the class visited various plants including a paper mill and various sawmills.

A Combination Interesting to Lumbermen

On Feb. 10 it was announced that Elmer H. Adams, Asa G. Adams, Ralph Crews, D. S. Bobb and James B. Wescott had formed a co-partnership for the general practice of law. The co-partnership will do business under the firm name of Adams, Crews, Bobb & Wescott, and will be located on the eleventh floor of the American Trust building.

The members of this firm have for some time been known for their practical knowledge of the lumber business and their ability to successfully represent lumbermen in legal matters. Elmer H. Adams particularly has been actively connected with the lumber business and in fact is now associated with other lumbermen in a hardwood operation in Arkansas.

Annual Meeting Grand Rapids Concern

The board of directors of the A. L. Dennis Salt & Lumber Company, with headquarters at Grand Rapids, Mich., held its annual meeting on Feb. 8, at which the following officers were elected: A. L. Dennis, president; Edward Fitzgerald, vice-president; Earl L. Crossman, secretary; Henry Irema, treasurer.

Inquiry on Freight Bills

Under date of Feb. 13 the Interstate Commerce Commission issued from Washington an inquiry the purpose of which is as follows:

For the purpose of determining whether the rules, regulations and practices in connection with the issuance of form and substance of receipts and freight bills are unjust, unreasonable, unjustly discriminatory, unduly preferential or otherwise unlawful, and taking such action in connection with said receipts or freight bills as may be authorized by law to prevent further violations of the provisions of the aforementioned statute [act to regulate commerce], should any violation be disclosed by said investigation, and particularly for the purpose of determining whether the freight bills or receipts shall include, with respect to the shipments covered thereby, the following:

1. The point of origin.
2. The date of shipment.
3. The correct weight of shipment.
4. The route, including the name and initials of each carrier participating in the haul, and the junction points through which the shipments moved.
5. The initials and number of the car.
6. Adequate description of the property transported.
7. The rate or rates applied to the transportation.
8. A statement of the nature, amount, and point of accrual of each item of charge for stop-in-transit, reconsignment, switching, car service, storage, or any other charge incident to the transportation.
9. Where such bills are presented to the consignee they should also show the name of consignor, and date of arrival of shipment at destination.

The result of the inquiry will be the issuance of necessary orders bearing on the question of freight bills.

Forms New Company in Philadelphia

The Hoban Lumber Company has been incorporated at Philadelphia to do business in southern hardwoods, maple flooring, hemlock, yellow pine, timbers, size, flooring and roofers. George M. Hoban and R. C. DaCosta are the principals in the new company. Mr. Hoban was secretary and director of the Carolina Lumber Company of Philadelphia up to Feb. 15, at which time his resignation was accepted by that concern. Mr. Hoban is a brother of J. E. Hoban of the Hoban-Hunter-Feitner Company of Brooklyn, N. Y. He has had an extensive experience in handling long and short leaf pine as well as hardwoods in the East.

English All the Go

The demand for English furniture and furnishings in the styles made classic by the early cabinet-makers, still continues strong. The Georgian period, including the work of Chippendale, Heppelwhite and Sheraton, seems most in favor, probably because it lends itself more easily to the uses of the day, probably because it gives the decorator a wider scope in which to exercise his inventive and adaptive genius. The earlier English styles, the Tudor, the Elizabethan, the Jacobean and, in some instances, William and Mary, are reserved for special treatments where the size and character of the room permits them to be used as they should. The small, in the sense of compact, rooms of the modern city apartment are not well calculated to hold the massive four-post beds, mantels and fireplaces, chairs and tables of the Elizabethan and Jacobean type. Such furniture requires unlimited space to be used advantageously. It is interesting to note that the heretofore exceedingly popular Louis XVI. style is giving away to bed-rooms, boudoirs and ball-rooms done in Adam, a style of decoration that is once satisfying and worthy when used aright.

Bill of Lading Rules Protested

The Interstate Commerce Commission was recently in receipt of a petition from the Lumbermen's Association of New Orleans, protesting against recently completed arrangements between steamship lines sailing from New Orleans and the local rail lines. The arrangements had to do with the issuance and treatment of shipments of forest products on through bills of lading from points west of the Mississippi river. It was pointed out further in the petition that shipments on local bills are unjustly discriminated against in favor of shipments on through bills of lading. Under the new arrangement, the shipments on the through bills enjoy certain advantages in the matter of free time allowances, additional time for delivery in rail shipment and similar advantages which the shipper on local bills does not have. It further says: "In legal effect, there can be no distinction between shipments on through and local bills of lading for export and no warrant of law for any different treatment in the matter of demurrage, etc." In the petition, the commission is asked to compel publication by the defendant lines of rules which will effect just and equal treatment to shipments on through bills of lading and on local bills of lading. Special Examiner Marshall of the Interstate Commerce Commission will preside at a hearing of the case, which will take place at New Orleans on Feb. 27.

Will Saw Deadheads

A mill has been erected on one of the dams at Merrill, Wis., in which deadheads gotten from the river will be sawed under contract. The arrangement of the mill is unusual. An upright engine is used for operating the rotary, to which the rotary shaft is attached direct. The carrier is operated by a pinion feed. The mill is also equipped with an edger which, however, has only two saws. A slasher is further provided. The boiler is located a short way from the mill and is supported over the fire by cross-arms. The mill crew consists of only three men.

A Lumber Company the Goat

A well thought out swindling scheme was recently frustrated when the Chicago police apprehended Claude Knapp and F. L. Tarbell. Knapp had been paroled from the Joliet penitentiary, and two days after the beginning of his parole he opened offices in the Marquette building, Chicago. Knapp's aptitude at figures gave him work in the bookkeeping department at Joliet, and while there he learned that the American Hardwood Lumber Company of St. Louis, Mo., had been selling extensively to the prison. Upon gaining his freedom he immediately had billheads printed purporting to be those of the Chicago branch of the American Hardwood Lumber Company.

Knapp then forwarded to one of his cronies at the prison, a magazine, in the leaves of which was confined a billhead made out for a car of expensive hardwoods amounting to considerable money. The scheme had been worked out beforehand, and the man at the prison end forged the name of the foreman of the department, marked the bill O. K., and placed it with some others so that it went to the bookkeeping department. The warden promptly wrote out and mailed a check for the amount specified.

The hitch came when the American Hardwood Lumber Company actually forwarded the car to the penitentiary from St. Louis and sent a bill. When the first bill arrived the accomplice in the prison managed to destroy it, but the second bill was received by the warden.

January Cut and Shipments Northern Association.

The cut and shipments for January, 1912, and January, 1913, are compared in a statement issued by the Northern Hemlock and Hardwood Manufacturers' Association. The report contains returns from the same fifty-six firms in both instances. It shows an increase in hardwood cut of 59 per cent, and an increase in hardwood shipments of 20 per cent. The increase in hemlock cut is three per cent, and the increase in hemlock shipments 17 per cent. The total increase in cut during the year as noted was 30 per cent, and the increase in shipment during the year 18 per cent.

The total cut of all hardwoods in January, 1913, was 26,253,000 feet and in January, 1912, 16,540,000 feet. Shipments of all hardwoods for the same respective periods were 17,920,000 feet and 14,924,000 feet.

The total cut of hemlock for January, 1913, and 1912, respectively, was 19,049,000 feet and 18,435,000 feet. Shipments for the same respective periods were 26,678,000 feet and 22,822,000 feet.

Bulletin on Sanitation in Industrial Plants

The Industrial Commission of Wisconsin has been attracting considerable attention because of the able way in which it has been getting at the solution of the many problems placed before it in the matter of the relations between industrial employers and employees. It has covered the ground comprehensively in many lines, and its latest effort has involved the publication of a series of bulletins, one of which contains general orders on sanitation.

The bulletin enumerates the provisions for the laws on this subject on the statutes of the state of Wisconsin. It further explains the provisions of the law, and in short, places the matter concretely and clearly before the industrial employers of the state, thus giving them every aid in the matter of carrying out the provisions as ordered in the sanitation act.

Lumber From Blighted Chestnut

"I scarcely cut any blighted timber, and dead chestnut is not worth much to me."

The above quotation is from a reply to an inquiry regarding the use of blighted chestnut timber. It expresses very largely the sentiment of many wood users, as to the value of lumber and other products from chestnut affected with the chestnut tree blight. It seems to be a general opinion that the blighted chestnut is either dead or rotten chestnut. The lumberman or wood user who is not familiar with this disease naturally infers that because it is a "blight" it means dead timber in some stage of deterioration. It is true that where the blight first began its ravages in the northeastern United States, some of the trees which are still standing, after being killed by the blight, are in poor condition for lumber or most other chestnut products. It must be realized that blighted chestnut, in order to have lost any of its merchantable value, must have stood dead on the stump for one or more years after being killed. It is safe to state that blight in itself does no injury to the wood, and does not impair its merchantable value. The blight is a bark disease and may be compared to a skin disease. When it attacks and girdles a tree near the base, it produces much the same effect on the wood as though the girdling were done with an axe. It is only after it has killed a portion or all of a tree, that wood rotting fungi and many insects enter the wood, chiefly where the blight lesions occur and the resulting deterioration is much the same as though death had been caused by any other agency.

The wood of blighted chestnut, if cut and utilized as soon as the disease has attacked the trees, and while still green, or before the trees have been dead as long as a year, is in every respect as good as though cut from a perfectly healthful tree. In the production of lumber, all the effect on the wood which the blight itself is able to produce is entirely removed with the slabs during the sawing operation.

It is impossible to separate lumber cut from blighted chestnut from lumber cut from unblighted chestnut. Blighted chestnut does not mean dead chestnut. The defects in lumber from dead trees must not be charged to blight, since the same defects occur in lumber cut from trees dead from any other cause. In the utilizing of lumber from blighted chestnut, there should be no discrimination and there is no reason why lumber from such trees cannot be used the same as lumber from unblighted trees.

Wood's Strength Increases With Age

The natural impression is that new wood is stronger than old. It has been found, however, in a series of tests that some white pine a quarter of a century old is materially stronger than new wood. Pine is the wood on which the experiments were made, but there is no reason to suppose that oak, hard pine or any other wood commonly used in building would behave differently. All wood maintains its strength, except as decay weakens it or fire and mechanical abrasion destroy it.

It is largely a matter of dryness. It is well known that a wood is much stronger when thoroughly seasoned than when green.

Engineers are already using wood for permanent service where it is kept under water. Its permanent reliability under such conditions is literally a foundation fact in engineering. Wood above water is subject to destruction by fire and decay, but if these two enemies are kept away it is difficult to set a limit to the useful life of timber. There are plenty of wooden truss bridges all through the East, whose structures have been protected from the weather and which have been carrying traffic from fifty to a hundred years. Many people who have traveled abroad will recall noted wooden bridges and other wooden structures of much greater age. In fact, were it not for the increasing cost and scarcity of good timber, there is reason to believe that many country highway bridges of moderate span and light loads would be more permanent if built of wood than of steel. Although wood is the oldest historically of our constructive materials, yet the question of change of strength with age has never before been studied.

Greenheart

The construction of the Panama canal lock gates of greenheart has called attention in this country to that wood, which is cut only on the northern coast of South America. The Forest Service has just issued a circular (No. 211) in which the wood is described, and figures are given to show the quantity used. The amount has been decreasing quite steadily for twenty years, due largely to the increased use of concrete in construction. The wood weighs about seventy-five pounds per cubic foot, and is sixty-five per cent stronger than English oak. The color varies from brown to black, but usually is dark green. The circular was written by C. D. Mott and W. D. Brush of the Forest Service.

Personal Appearance Counts

One of the most important things for the young salesman to learn is that courtesy is an essential factor in selling merchandise. It should constantly be borne in mind that every person who enters the store is in a sense an invited guest, and should be treated as such.

The personal appearance of a salesman has a great influence on the customer. Cleanliness, neatness, and the avoidance of extravagance and display in dress should be the rule.

The successful salesman is careful not to make promises which cannot be absolutely fulfilled. It is better to lose a sale than to make

the positive statement that goods will be delivered at a certain time, when there is no certainty that they will be. The best patronage comes from satisfied customers; broken promises do not make satisfied customers.

While successful salesmanship is based largely on big sales, it is important that every visitor to the store be treated with equal courtesy, whether a sale results or not. Polite attention, interest in one's duties, and care in waiting upon customers, are big factors in creating a favorable sentiment. It pays to please the person who is simply looking at goods, because the good impression created by courteous treatment in showing goods will often lead the visitors to become a future purchaser.

A New Thing in Boxes

The large percentage of lumber which goes into the manufacture of wooden boxes insures the success of any idea tending to preserve the life of wooden containers. A man at Wichita, Kan., is responsible for the inauguration of a new idea in knock-down boxes. This box is made up of sections accurately cut so as to fit together, and the idea involves a steel attachment which will hold the pieces together by slipping it over the corners. This should mean that boxes would have a much longer term of life inasmuch as instead of prying off nailed covers and splitting the boards to pieces, it will be necessary only to remove the attachment and the box will fall apart. Furthermore, the railways will undoubtedly grant a concession in the matter of returning the empty boxes packed together in sections, as they make such concessions on empty beer boxes and barrels.

Returns to National Casket Company

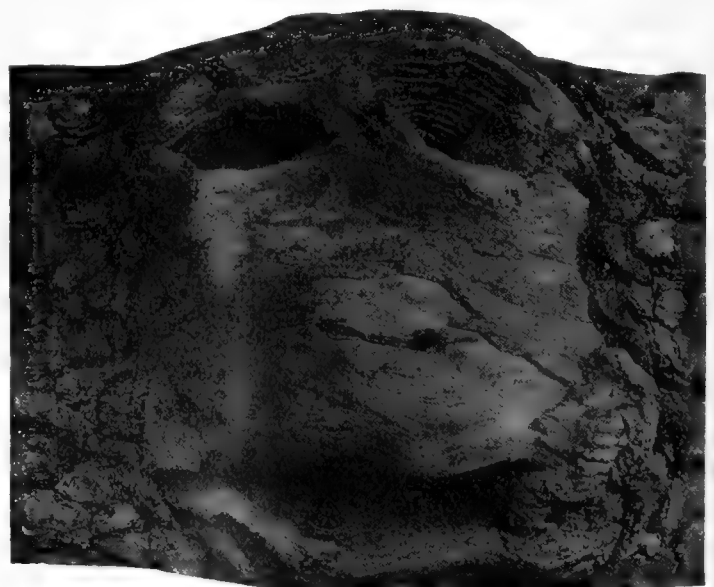
J. S. Hickok writes from the office of the Fred S. Morse Lumber Company of Springfield, Mass., that he is severing his connection with that concern and will again take up his former position with the National Casket Company as manager of the lumber department. The National company recently transferred the executive offices from New York to the Oliver building, Pittsburgh, Pa. Mr. Hickok will have his headquarters at that place and wishes it to be known to the trade that his office is always open to his friends.

Fighting Fire by Wireless

At the recent forest fire conference at Seattle, which was attended by western state delegates, members of the Forest Service, and delegates from British Columbia, one of the most interesting topics discussed related to the possibilities of replacing the telephone and telegraph systems by wireless. A representative of a wireless company explained the workings of a proposed plant, and it was believed that apparatus that would cover an area of from 25,000 to 35,000 square miles could be supplied for about \$1,600, and could be carried by mules.

Are Monkeys in Existence in Mississippi Forests?

While it is generally supposed that the monkey family is confined to tropical forests, proof of the falsity of this popular idea is found in the photograph recently sent to *HARDWOOD RECORD* by D. H. Williams of Belzoni, Miss. A cut made from this photograph is shown on this page. It may be that this is a fossilized physiognomy of a pre-historic baboon who perhaps was caught out late one night and sought refuge in the heart of the tree. Judging from the terrorized expression of his face, he spied a knot-hole in the morning and, in trying to force his way through, got stuck half-way and has gradually turned into a petrified monk. At any rate, judging from the ferocious expression of his face, it would not



BABOON FACE ON DOGWOOD BLOCK CUT BY D. H. WILLIAMS, BELZONI, MISS.

be a pleasant sensation to run across this "phys" if one were alone in the immediate vicinity along about dusk.

The baboon "cage" is a dogwood tree; thus it will be seen that there is at least a remote reason for the connection between the face and the tree.

Controlling Timber Beetles

Announcement has been made by the Secretary of Agriculture at Washington that a campaign against pine bark beetles on a tract of 90,000 acres in Oregon has resulted in showing that it is practicable to curb the activities of this destructive pest. The work was carried out for experimental purposes. The number of trees killed on the tract where the repressive measures were executed was 32,480 less than on an adjoining tract of the same size and similar conditions, where no work was done. It is well known that the pine beetle is one of the most destructive forest agencies, millions of trees being killed in some years. Progress in the direction of control of the pest will be welcomed by all lumbermen.

Analysis of Turpentines

The Forest Products Laboratory at Madison, Wis., has published Bulletin 105, showing the result of a long series of experiments in analysis and refining of turpentine. The publication was prepared by L. F. Hawley, chemist in charge. The bulletin is strictly technical in character, and doubtless will prove of much interest to persons who deal in turpentine, either as manufacturers or merchants.

Hardwood News Notes

< MISCELLANEOUS >

The Quigg Chair Company has been incorporated at Livermore, Ky. at \$10,000.

The Acme Refrigerating Company will operate at Hammond, Ind., with a capital of \$10,000.

The Glen Park Lumber Company has been incorporated at Gary, Ind., with a capital of \$60,000.

The Buckeye Churn Company of Sidney, O., has increased its capital from \$150,000 to \$250,000.

The Vaca Land & Lumber Company has been incorporated with a capital of \$15,000 at Norfolk, Va.

J. L. Hudman Lumber Company has been incorporated at Curtis, Ark., with a capital stock of \$16,000.

The Hale-Justice Company has been incorporated at Cincinnati, O., with a capital stock of \$100,000.

The Meadows Manufacturing Company of Pontiac, Ill., has increased its capital from \$30,000 to \$50,000.

The Boyne City Handle Company, Boyne City, Mich., will do business with an authorized capital of \$30,000.

The B. W. Hughes Company has been incorporated at \$50,000 to do a general lumber business at Louisville, Ky.

The Straight Creek Lumber Company has been incorporated at Pineville, Ky., with a capital stock of \$10,000.

The Kenova Sawmill Company has started business at Kenova, W. Va. This company has a capital stock of \$10,000.

The McFall-Heyser Lumber Company is the style of a new incorporation at Cincinnati, O., with \$50,000 capital.

The Covington Manufacturing Company will manufacture implements at Covington, Ala., operating with a capital of \$10,000.

The Johnson-Wilcox Hardwood Lumber Company has been organized at Los Angeles, Cal., with an authorized capital of \$50,000.

The Kuney-Parrette Lumber Company is the name of a new concern at Three Lakes, Wis. This company has a capital of \$20,000.

A new Wisconsin concern is the Conant Basket Company, which will operate at South Milwaukee, with an authorized capital of \$15,000.

The Lakewood Lumber and Construction Company has been incorporated at Whitehall, Mich., with an authorized capital of \$10,000.

The Capital Body Company has been started at Indianapolis, Ind. This company will manufacture bodies and is capitalized at \$10,000.

The Doll & Zoeller Lumber Company has been organized at Louisville, Ky., with a capital of \$20,000 by J. Louis Doll, Jesse A. Doll and Fred E. Zoeller.

The Buckeye Safety Window Company is the name of a new concern recently incorporated at Cleveland, O. The company has a capital stock of \$30,000.

The Farmers Handy Wagon Company of Saginaw, Mich., has changed its name to the McClure Company, and increased its authorized capital to \$500,000.

Schneider & Brown, a partnership at Marquette, Mich., has been succeeded by the Schneider & Brown Lumber Company, incorporated. The capital stock is \$75,000.

The Curtis & Pope Lumber Company of Boston, Mass., has been incorporated under the same firm style by E. W. Pope, B. Pope and D. A. Lucey of Boston. The company will operate with an authorized capital of \$250,000.

The California & West Virginia Lumber & Mining Company with a three million dollar capital has been incorporated at Charleston, W. Va. Cal. Balmer, secretary of the Gillett Lumber Company, Lima, O., announces that that company is erecting a mill at Lima and will specialize in the manufacture of wagon stock and ball bats.

The East Moline Sash & Door Company of East Moline, Ill., is contemplating the erection of a new factory building, which will embody many improvements. Work will probably be started in the near future.

H. E. Townsend is building a hardwood sawmill at Texarkana, Tex., on the site of the creosote plant destroyed by fire a couple of years ago. The plant will be ready to begin operation in about two months and will give regular employment to about twenty-five men.

The Moosehead Lake Manufacturing Company will operate at Greenville, Me., dealing in and manufacturing both hardwoods and softwoods and their products. The company has a capital of \$25,000 and the officers are C. E. Woodard, president; H. W. Newenham, treasurer, both of Greenville.

The Lucas Land & Lumber Company of Paducah, Ky., which lost its plant by fire a few months ago, has closed a deal whereby it secured possession of the plant of the Morcenthaler Horton Basket Company, which has been idle for over three years. The Lucas company manufactures veneer and boxes and will employ about 125 men.

< CHICAGO >

The West Side Sash & Door Company is the style of a new concern starting at Chicago, Ill. The company has a capital stock of \$32,000.

A circular on oak flooring has just been received from the Oak Flooring Bureau of Detroit. The book contains a summary of the different grades of oak flooring, and some photographs showing important structures in which oak flooring has been used.

The Lumbermen's Club of Chicago will hold a stag party and smoker at the club rooms on Friday, February 28. The entertainment committee has prepared a program which will undoubtedly be superior to any which has yet been carried out. Those attending will be assured of a good time.

The Lumbermen's Association of Chicago holds a meeting today, Feb. 25, at 12:45 noon, at the Hotel LaSalle. This is a regular meeting of the association and luncheon will be at 1:00 o'clock. J. E. Rhodes, secretary of the National Lumber Manufacturers' Association, will address the meeting.

Robert A. Birmingham of the Dieckmann Hardwood Company of San Francisco, Cal., spent several days in this city recently and called at HARDWOOD RECORD offices on Feb. 14. Mr. Birmingham stated that the outlook on the Pacific coast is excellent.

Marshall Butters and Robert Butters of the Marshall Butters Lumber Company, Alliance, Mich., were in the city for a few days last week and during their stay favored HARDWOOD RECORD with a much appreciated call. The Marshall Butters Lumber Company is a comparatively new organization in Michigan.

J. B. Finlay, president of the Moline Pole and Shaft Company, Moline, Ill., called at the offices of HARDWOOD RECORD on Feb. 13.

Fred Mowbray of the Cincinnati firm of Mowbray & Robinson Company was in the city several days last week on business and dropped around at the HARDWOOD RECORD offices.

E. M. Holland of the Cartier-Holland Lumber Company, Ludington, Mich., was in town Thursday and Friday of last week and stopped in at these offices long enough to state that work on the company's new mill at Ludington is progressing very satisfactorily. The new Cartier-Holland plant will be a model and embody many unique features entirely original in Michigan manufacturing circles.

M. L. Pease of the Galloway-Pease Company, Poplar Bluff, Mo., and Saginaw, Mich., made one of his periodic trips to the Chicago market last week.

C. H. Sherrill of the Sherrill-King Mill and Lumber Company, Paducah, Ky., was in the city on business the early part of last week.

J. T. McRoberts, manager of the Wabash Hardwood Company, Memphis, Tenn., spent several days last week with the Chicago trade. Mr. McRoberts reports that sales are easily effected, but that there is some difficulty in getting adequate stock.

I. A. Burshong of the Northwestern Cooperage and Lumber Company of Gladstone, Mich., spent several days of last week with the local trade.

Frank T. Sullivan, manager of the Buffalo yard of Hamilton H. Salmon & Co. of New York, stopped off in Chicago last week on his return from a trip to the Northwest. Mr. Sullivan found time to call at HARDWOOD RECORD offices.

W. D. Reeves of the W. D. Reeves Lumber Company of Little Rock, Ark., has been in the city for several days on business.

M. J. Quinlan of the Menominee Bay Shore Lumber Company of Soperton, Wis., spent a few days the early part of last week with the local trade.

Frank I. Abbott of the Frank I. Abbott Lumber Company, Chicago, returned on Friday of last week from an extended trip to Memphis, Arkansas and other points.

R. S. Kellogg, secretary of the Northern Hardwood and Hemlock Manufacturers' Association, Wausau, Wis., was in Chicago three days last week in attendance at the meeting of the National Association of Box

Manufacturers at the Hotel LaSalle. Mr. Kellogg, who is optimistic in his views of the lumber situation, stated that there is no possibility of a break in prices for a long time to come.

◀ NEW YORK ▶

Local lumber dealers are interested in the Murtagh-Jackson workmen's compensation bill now before the legislature. The bill is being opposed by nearly all manufacturers and other employers of labor, and the lumber trade of the state was represented at a hearing on the bill at Albany Feb. 19. It is expected that the measure will be modified before final action is taken on it.

On Feb. 6 G. A. Mitchell, head of White, Gratwick & Mitchell, gave a theater party and dinner at the Hotel Vanderbilt to the officers and department heads of the various affiliated wholesale selling companies. There were about thirty present. This is an annual event, but this year broke all records for a good time.

The New York Lumber Trade Association held its regular meeting on Feb. 19 at its headquarters, 18 Broadway. Three new members were elected and other routine business transacted at a meeting of the board of trustees held immediately after the regular meeting.

B. P. Whedon of W. D. Young & Co., manufacturers of maple flooring, Bay City, Mich., was a New York visitor last week. Mr. Whedon was on his usual business trip and had traveled the middle and southwest territory and New England States. He looks forward to a strong market and a higher range of prices.

The East River Mill & Lumber Company held a directors' meeting last week at which time D. J. O'Connell was elected president, to succeed the late Thomas J. Crombie, and C. D. Folsom was elected secretary and treasurer to fill the vacancy caused by Mr. O'Connell's promotion. These men and P. C. Anderson compose the directorate of the corporation.

The Maley, Thompson & Moffett Company, specialists in Cuban mahogany and walnut, headquarters at Cincinnati, O., and branch office at 65 Beaver street, Manhattan, has just received at this port a cargo of fine mahogany logs from Cuba. The shipment comes from Moffett, Robbins & Company, Cuban branch of the Cincinnati house.

The Consolidated Lumber Company of Georgia, with headquarters at Brunswick, Ga., has closed its New York City sales office and hereafter will handle all business direct from the main office. This will facilitate shipments and is in line with the company's plan to make its service as complete as possible. It is making a special drive on rail business into the Middle Atlantic States.

C. S. Powell, formerly of Bay Side, Long Island, has opened an office in the Wilson building, 1270 Broadway, where he will conduct an export and domestic hardwood business.

G. F. Farrell, formerly president of the O'Neill Lumber Company of Jersey City, has disposed of his interest in that concern to S. Henry Baldwin and brothers. The officers of the company are now: P. A. Baldwin, president; G. B. Baldwin, vice-president, and S. Henry Baldwin, secretary and treasurer.

The stockholders and directors of the Lumber Insurance Company of New York met in annual session on Feb. 5. The following officers were elected: G. A. Mitchell, president; W. H. Gratwick, vice-president; Guy White, treasurer, and R. H. McKelvey, secretary. Geo. M. Stevens, Jr., was elected to the board of directors. The financial statement as of Dec. 31, 1912, was most gratifying, showing a big increase in surplus to policy-holders and total assets.

◀ BUFFALO ▶

The ruling of the Interstate Commerce Commission on the transit privilege pleases the Buffalo lumbermen, especially the hardwood dealers whom it most concerns. It means the doing away of the rule forbidding substitution at transit points, as for instance oak for maple and vice versa. For some time the hardwood men have been handicapped by the regulations in force by the railroads, and the local market will now be on a much better basis than it has been. The commission went into the matter thoroughly and held two or three hearings at which Buffalo hardwood dealers were present.

Willis K. Jackson of Jackson & Tindle, with members of his family and others, sailed on Feb. 22 for a trip to Panama and the West Indies.

O. E. Yeager was among the business men from this city who appeared before the legislature on Feb. 19 in opposition to the Murtagh-Jackson workmen's compensation bill. Nearly every business and trade association was represented.

A. W. Kreinheder made a trip to the Tennessee mills of the Standard Hardwood Lumber Company this month. He states that operations in that part of the South have been much delayed by wet weather.

T. Sullivan & Co. have lately been getting in stocks of maple to replenish the supply in yard. Reports from the office state that one-inch Nos. 2 and 3 basswood in this market has been well cleaned up.

H. A. Stewart, who was recently in West Virginia, states that buyers are very numerous at the mills there and that supplies of chestnut and poplar are being picked up rapidly at stiff prices.

G. Elias has returned from an eastern business trip. The firm of G. Elias & Bro. has found the hardwood trade very good this month, with a demand for all sorts of stock.

B. E. Darling of Blakeslee, Perrin & Darling, Inc., was lately in the

South looking after the purchase of hardwoods. The firm has a large amount bought in most varieties and is laying in quite an amount of cypress.

Hugh McLean was at the mills of his lumber company in the South for a week this month. Angus McLean of Montreal has been spending some days at the company's offices here.

The National Lumber Company reports that trade has been exceptionally good this month. James A. White, president of the company, lately took an office in the White building, where he will look after the interests of the W. H. White Company.

M. M. Wall has returned from a two weeks' trip to Mt. Clemens, where he went with his friend Peter McNeil of the McNeil Lumber Company. The Buffalo Hardwood Lumber Company has been selling quite an amount of birch this month.

W. P. Miller of Miller, Sturm & Miller has been in Ohio and other western states this month, looking over lumber stocks and closing a deal with two or three mills for shipment of hardwoods.

Anthony Miller finds trade showing considerable improvement since the first of the year. He has a well-selected stock and finds a good sale for oak, birch and other woods.

◀ PHILADELPHIA ▶

The Thomas E. Coale Lumber Company reports increased trading, with promising outlook. It recently divided its Pittsburg branch of business into two subsidiary companies which will facilitate the handling of the trade. One company will be known as the S. B. Dill Company, recently incorporated with a nominal capital of \$5,000, and with headquarters in the same suite of offices as parent concern. It will specialize in railroad ties and timber. The officers are: President, S. B. Dill, formerly with the Thomas E. Coale Lumber Company; secretary, Frederick H. Ely, also of the old house; treasurer, R. H. Moore.

The second company will be known as the B. W. Cross Lumber Company, recently incorporated, \$5,000 capital, offices in the Oliver building, Pittsburgh. The president, B. W. Cross, formerly in charge of the Pittsburgh branch of the old concern, having had about twenty years' experience in the lumber business, needs no introduction to the trade. Frederick H. Ely is secretary; R. H. Moore, treasurer, associated with the Thomas E. Coale Lumber Company, and is also treasurer of the S. P. Bowers Company of Philadelphia. It will do a general wholesale lumber business.

John H. Schofield of Schofield Brothers, owners of the Saltkeatchie Lumber Company, says there has been no interruption to trading since Jan. 1, and their fiscal year, ending March 31, will show the biggest year's business they have ever had. Robert W. Schofield is at the mill in Schofield, S. C., hurrying up shipments.

Charles G. Blake, manager of E. V. Babcock & Co., reports accelerated business, with every indication of further increase as the season advances.

Ben C. Currie of Currie & Campbell, says business is fairly good and inquiries more liberal, which promises well for the outlook. James H. Campbell and William N. Lawton of this house are at their mill in Jacksonville, N. C., hustling out stuff.

Howard B. France, secretary and treasurer of the Monarch Lumber Company and of the Haddock-France Lumber Company, reports business well sustained and the outlook very favorable, providing prices are not forced to a prohibitive point. The large corporate consumers stand ready to shut down on buying as soon as any attempt is made to force values.

The large warehouse and lumber sheds of B. F. Hiestand & Sons, Marietta, Pa., were destroyed by fire, Feb. 8. The loss is estimated near \$250,000.

◀ PITTSBURGH ▶

J. N. Woollett, president of the Aberdeen Lumber Company, spent a good part of this month in the Southwest buying gum and cottonwood. He unloaded one barge of cottonwood at Louisville last week and has three more barges coming up the river for early distribution.

H. C. Messler, of the J. M. Hastings Lumber Company, spent two weeks recently in the South. He reports the export trade in fine condition there.

The W. P. Craig Lumber Company announces that the prices are still strong and business is first-class. It is still handicapped by the lack of cars at some mills.

The Adelman Lumber Company is getting into a very nice business in general hardwoods. A. Adelman has been working the Ohio trade the past week.

A. G. Breitwieser of C. E. Breitwieser & Co., a new hardwood concern, was also working Buckeye retailers early in the month. His concern is arranging to do considerable business in cypress this year.

The Foster Lumber Company has eight mills of its own cutting hardwood on tracts in Tri-State territory. It shipped forty cars of white oak last week, most of it being bill stuff.

D. L. Gillespie of D. L. Gillespie & Co. was in the Middle West on business a few days last week. H. G. Clark of the same company has gone to Mississippi for a few days.

The Mell-Vial Lumber Company is a new concern at Kittanning, Pa., formed by Howard W. Mell and O. H. Viall and others of that place.

The B. W. Cross Lumber Company is getting under fine headway for

a new concern, and B. W. says that business looks good all around the Pittsburgh district.

The E. H. Shreiner Lumber Company is getting ready to sell a lot of chestnut and poplar for it has contracted for some fine stocks of these woods this year. Mr. Shreiner lately made a trip among the southern mills.

H. T. Bettinger, of the Nicola Lumber Company, has been on a buying expedition in the South for several weeks. The Nicola company is getting a fine business this spring and says everything looks good.

← BOSTON →

Leonard J. Jackson, who for thirteen years has been connected with the W. A. Fuller Lumber Company, Leominster, Mass., is now connected with the Lyon Cypress Company, at Caryville, Ga.

The Emery Lumber Company, Portland, Me., has been incorporated with a capital stock of \$10,000. The promoters are C. N. Haskell, Leslie L. Mason and Irving E. Vernon.

The Bangor Lumber Company, Bangor, Me., has been incorporated with a capital stock of \$50,000. The incorporators are: Henry Patton, James Q. Guinac, Albany, N. Y.; Don A. Sargent, Bridgeport, Conn.; D. Allston Sargent, South Brewer, Me.; Fred C. Patton, Albany, N. Y.

The Keswick Lumber Company, Bangor, Me., has been incorporated with a capital stock of \$25,000. The incorporators are: M. G. Lowell, Waldo P. Lowell, Bangor, and John R. McVonnell, Marysville, N. B.

There has been more doing in the building line in Boston during the past winter than for several years. Other cities have experienced a similar increase. Several office buildings have been completed, which have called for a large amount of interior finish, and the mills in this section have been kept very busy.

Peck & Marcoullier, lumber dealers and woodworkers, Westfield, Mass., have dissolved and the business will be conducted by George F. and Arthur D. Marcoullier, under the name of Marcoullier Brothers. Abner E. Peck and his son, Luman O. Peck, retired from the firm, but will continue in the lumber business.

The Thames River Lumber Company of New London, Conn., at its annual meeting voted to increase its capital stock by \$25,000, making a total stock of \$100,000.

The E. C. Wright Block Company, Brockton, Mass., is building a large factory in that city, for the purpose of manufacturing last blocks. This will make a demand for large quantities of hardwood lumber, especially maple.

Sarah A. Leatherbee, widow of John W. Leatherbee, one of the pioneers of the lumber industry in Boston, died at her home in Jamaica Plain, late in January, at the age of eighty-eight years.

← BALTIMORE →

President Fred Arn, the new executive of the National Lumber Exporters' Association, acting on an invitation of the National Wholesale Lumber Dealers' Association, has appointed Harvey M. Dickson of the Dickson Lumber Company of Norfolk; John L. Alcock of John L. Alcock & Co., Baltimore, and Walter Hart of Price & Hart, New York, official representatives at the annual meeting of the wholesalers, which will be held at Atlantic City March 6 and 7.

William Otis Price, for years engaged in the hardwood export trade here, with offices in the Continental building, Baltimore and Calvert streets, died on Feb. 12 at his home, 1906 Walbrook avenue, after an illness of about two years. For a year he had been at his office only at rare intervals, and for several months he was confined to bed. Mr. Price was born forty-five years ago in Frederick county, Maryland, and first became identified with the hardwood trade as an inspector for Price & Heald. Later he formed a partnership with his brother under the name of E. E. Price & Bro., which partnership was dissolved after some years, when W. O. Price engaged in business on his own account. He was very successful as long as his health remained good. He held membership in the National Lumber Exporters' Association and was identified with other movements to promote the best interests of the trade.

Robert McLean, a well-known hardwood exporter and official of the Battery Park Lumber Corporation, with a mill at Battery Park, Va., returned Feb. 17 from a several months' trip abroad. Mr. McLean reports that the hardwood situation on the other side is decidedly encouraging, and his views fully bear out the optimistic accounts sent out in recent months about the export business. Mr. McLean found that the demand for all kinds of stocks was good, even brisk, and that prices were being well sustained. He is a large shipper of gum, which wood, he states, is holding its own and rules very firm.

H. L. Bowman, sales manager of the R. E. Wood Lumber Company, Continental building, has gone to Rift, W. Va., to look after the operation of the company's mill there and to confer with the superintendent in regard to the special requirements of the company. From there it was his intention to proceed to Fontana, N. C., where the company is about to put in operation its new mill, erected to take the place of the plant operated for some years. G. L. Wood, the general manager of the company, is also at Fontana, giving the work of construction his personal attention.

David T. Carter & Co., hardwood men, have moved from the tenth to the ninth floor of the Calvert building, the expansion of their business requiring more office room.

E. P. Burke, president of the Battery Park Lumber Corporation, has moved his office from the Stewart building to the Munsey building, Calvert and Fayette.

← COLUMBUS →

Upon the application of the Jobson Lumber Company, 528 City avenue, John T. Dunnick was appointed receiver of that company. Mr. Jobson claims to be surety on notes amounting to more than \$15,000, of which \$3,000 are due now. Receiver Dunnick gave bond in the sum of \$10,000.

D. R. Winn of the A. C. Davis Lumber Company has returned from a buying trip in the express district of the South.

The McFall-Heyser Lumber Company of Cincinnati, Ohio, has been incorporated with a capital stock of \$50,000 to deal in lumber and operate mills. The incorporators are: W. E. Heyser, Weaver Haas, Charles J. Hunt, D. A. Rebbach and Norwood J. Uiter.

Representatives of Ohio lumbermen and builders in conference with Governor Cox, requested that the optional feature be incorporated in the Green compulsory workmen's compensation bill, which is in the hands of the Senate labor committee. Most of the members of the delegation favored the compulsory provision in the measure but objected to the clause which makes the state the exclusive liability insurance agent.

With a mechanics' lien law to be enacted and appropriations for an extensive program of state building, local architects and contractors anticipate a revival of building operations as soon as these questions are settled by the general assembly. There is a lull just now in building plans and operations, owing to the uncertainty of the mechanic lien proposal. While a bill approved by representatives of the various interests involved has been drafted, it is feared that changes may be made altering the purpose of the law by the legislature.

J. A. Ford of the Imperial Lumber Company says trade in hardwoods has been good, prices firm and stocks growing a little scarcer, which has caused an advance in prices.

W. W. Hammerick, a wholesaler of Detroit, Mich., was a visitor in Columbus recently.

John Henderson, secretary of the Hope Lumber Company of Weston, W. Va., called upon Columbus shippers recently.

F. Everson Powell of the Powell Lumber Company reports a fair business in hardwoods, with the volume as good as can be expected under the circumstances. Stocks are only fair and there is not a great deal of lifting in receiving shipments.

W. B. Sissons, sales manager for the Sowers-Leach Lumber Company, says trade is about the same with prices high. Mr. Sissons looks for a good demand for hardwoods when the spring building season opens.

L. B. Schneider, sales manager for John R. Gobey & Co., says hardwoods are strong and inclined to advance. Stocks are very scarce and shipments are a little slow in coming out.

R. W. Horton, sales manager for the central division of the W. M. Ritter Lumber Company, says the demand is good for all grades and varieties of hardwoods. Both quartered and plain oak are especially strong and advances have been announced in the past two weeks. There is also a good demand for poplar, especially the lower grades.

F. B. Pryor of the W. M. Ritter Lumber Company has returned from a business trip in Michigan.

← TOLEDO →

The Skinner Bending Company reports a good business, the demand being much better than it was a year ago at this time. This concern has plenty of material on hand as it carries an unusually heavy stock at all times.

The Gotshall Manufacturing Company reports the general demand good and prices strong. This concern is greatly handicapped on account of the fire suffered last fall. The plant will be rebuilt as soon as the weather permits.

The Toledo Turning Works is running at two-thirds capacity and the management is looking for a heavy spring call.

The Toledo Bending Company is operating at two-thirds capacity and reports the demand for its product fair, although the management predicts that the strike difficulties in this country and the war in Mexico will affect the demand considerably. This concern does considerable exporting.

The Piqua Furniture Company of Piqua, O., manufacturer of library tables, by the voluntary act of all the stockholders, recently went into the hands of a receiver. S. Mendelsohn was named by the court as receiver. The factory will be operated by the receiver. The company was capitalized at \$55,000.

The Bryan, O., factory of the Bryan Showcase Company, which was recently destroyed by fire, has concluded not to rebuild in Bryan and is looking for a new location. It is intimated that Findlay, O., may be chosen. This concern is one of the leading manufacturers of display cases in the country.

← INDIANAPOLIS →

Fred C. Gardner of E. C. Atkins & Co. has been elected president of the Columbia Club.

The Furnas Office & Bank Fixture Company has increased its capitalization \$12,000.

M. W. Mix, of the Podol Manufacturing Company, Mishawaka, has been re-elected president of the Manufacturers' Bureau of Indiana.

H. C. Wiese has been appointed receiver for the Roach-Brown Manufacturing Company, manufacturer of tables and kitchen cabinets, on application of the W. M. Ritter Lumber Company, a creditor. Assets are \$11,000 and liabilities about \$12,500.

With an increase in capitalization, the Hoosier Veneer Company has been reorganized and incorporated with an authorized capital stock of \$100,000. The principal stockholders in the reorganized company are William T. Connor, Harry E. Dougherty, Frank Manners, Joseph Gross and Robert L. Connor.

The Hagerstown Lumber & Manufacturing Company has been granted a charter by the state and will conduct a manufacturing and retail lumber and planing mill business at Hagerstown. The authorized capitalization is \$15,000. Those interested in the company are Daniel B. Clark, Henry M. Keagy, Oscar Werking, Daniel O. Dilling, Horace Hoover, John M. Werking, William Stout, Eli Wiseheart, John C. Clark, Charles L. Stotelmeyer and A. R. Jones.

MEMPHIS

All danger from flood at Memphis has passed and even the plants which were closed down on account of high water have been able to resume operations. There were only a few of these and they were located on Wolf river. The interruption to manufacturing operations was extremely limited this season and lumbermen are congratulating themselves on the fact that the third highest stage in the history of the Mississippi river at Memphis has come and gone with so little injury and inconvenience.

South of Memphis conditions are not quite so favorable. There is still a large area overflowed near Beulah, Miss., and a number of manufacturers of hardwood lumber are finding themselves in a rather unenviable position. They have both timber and lumber under water, and in some cases the plants are out of commission and probably damaged to some extent. No breaks have occurred except at Beulah and advices from both sides of the river indicate that the levees will probably hold intact.

There has been a decided change for the better in weather conditions during the past week. Very little rain has fallen and the ground is drying out. So much rain has fallen since the first of the year that logging work has been very much interfered with. Operators of sawmills and owners of timberlands are glad of the change for the better in weather conditions because it will be possible to get out timber on a more liberal scale. Work in the woods since the first of the year has been quite limited and the timber outlook is not very encouraging at the moment.

The Valley Log Loading Company loaded for Memphis during January slightly less than 1,200 cars of logs on the Yazoo & Mississippi Valley line. This company says that it is having considerable difficulty in securing all the equipment necessary for the handling of log shipments. It says that it ought to be loading about 1,600 to 1,700 cars of logs per month, with the result that it is operating at less than seventy-five per cent of its capacity. An unusually large supply of timber was gotten out on the right of way of the Yazoo & Mississippi Valley line last fall and winter and this is now being loaded as fast as equipment can be secured for that purpose.

Russe & Burgess, Inc., have recently bought a considerable quantity of additional timberlands in Tunica county, Miss. This firm has owned a great deal of timber in the Mississippi valley for a number of years, and has found purchases there quite profitable. The exact amount purchased in the last instance is not known, but it is understood to have been considerable.

Arrangements have been completed for the trip to Panama and points in Central America to be made by prominent Memphians under the auspices of the Business Men's Club. A special train will be run from Memphis to New Orleans. Among the prominent lumbermen who will go on this trip are the following, all of whom are to be accompanied by their wives: Mark H. Brown, S. B. Anderson, Frank May and W. A. Ransom. There have been so many applications for additional accommodations that efforts have been made during the past few days to secure a second boat from New Orleans. Negotiations to this end, however, have been unsuccessful and those late in making their reservations will find it impossible to go.

Gatlett & Foley, Olney, Ill., have announced plans for the erection of a large sawmill and slack barrel stave plant at Harrisburg, Ark., for the development of timber on a large tract of land purchased in Poinsett county a short time ago. The company will not only locate its plant at Harrisburg, but will also build a standard gauge railroad from that point to its timberland holdings some miles distant. It is said that work on the plant will begin within the next sixty days.

The Arcola Hardwood Company has received its charter. The company is capitalized at \$10,000 and will engage in the hardwood lumber business at this point. The principal incorporators are: C. D. Hendrickson, Sam George, George Keith, W. R. Seat and W. H. Harrelson. Mr. Hendrickson has been prominently identified with the hardwood lumber industry of Memphis for a number of years.

J. W. Dickson, president of the Valley Log Loading Company, is confined to his home with a broken ankle, the result of his foot turning with

him in getting out of a taxicab the night of the masked ball at the Chickasaw Club.

The ordinance covering the arrangement between the city of Memphis and the Rock Island System has passed final reading and it is announced that work will shortly begin on the immense terminals to be erected by that system. It is provided in the ordinance that work on these terminal facilities must begin within thirty days after the passage thereof. It is provided by the congressional enactment that work on the bridge itself must begin by the latter part of July. The bridge and terminals are to be constructed by the Memphis & Arkansas Railway, Bridge & Terminal Company.

Advices received here from Jackson, Miss., indicate that practically all the lumber manufacturing plants in that state are operating on full time and that they have been interfered with to only a limited extent by the high water in the Mississippi. These dispatches also indicate that the car shortage is only a matter of memory, though it is pointed out that some localities are having difficulty in securing all the equipment necessary.

The Dugger & Goshorn Company has filed application for an amendment to its charter through which it seeks to increase the capital stock from \$30,000 to \$100,000. The document is signed by the principal incorporators. The company has recently established a band mill at Varner, Ark., and has purchased additional timberlands in that section. It has likewise increased the capacity of its plant at Memphis and otherwise enlarged the scope of its operations.

The Tennessee Hoop Company will have its plant for the manufacture of hoops, heading and staves in readiness for operation within the next few weeks. This firm recently increased its capital stock to \$100,000 in order that it might establish a plant for the manufacture of heading and staves, as well as elm coil hoops. Members of the Anderson-Tully Company are among the principal stockholders in the Tennessee Hoop Company.

BRISTOL

The Peter-McCain Lumber Company reports business in good condition. The company's mills here are now running full time.

There were numerous eastern buyers on the Bristol market this week. They report a scarcity of stocks in this section, although shipments for the past few weeks have been heavy.

W. S. Whiting, a well-known lumberman of Asheville, N. C., was a visitor this week on the Bristol market.

John T. Dixon of the John T. Dixon Lumber Company of Elizabethton, Tenn., was in Bristol this week on business.

The Carolina Spruce Company is installing a large mill on the Black Mountain Railway, in western North Carolina, which will soon be ready for operation.

The Paxton Lumber Company reports business in good condition. The company's mills are busy and it is doing a large volume of business.

Bristol lumbermen are now enjoying the fruits of their recent victory over the railroads, before the Interstate Commerce Commission. The milling-in-transit charge at Bristol has been reduced from one and one-half cents to two cents per hundred pounds.

D. D. Hartlove of Price & Heald, Baltimore, was among the eastern hardwood buyers on the Bristol market this week. He has bought heavily in this territory and is now shipping out a large amount of stock.

Numerous country mills about Bristol, which have been idle during the winter, are preparing to resume operation as early in the spring as possible.

LOUISVILLE

The visit of the members of the Louisville Hardwood Club to Nashville as the guests of the Nashville Lumbermen's Club on Feb. 18 was one of the most enjoyable visits of the kind ever planned. It went through without a hitch, and the Louisville men left for home at midnight after one of the most strenuous days in the way of enjoying hospitality that they had ever experienced. The visit will probably prove to be the first of several of this kind, not only between the Louisville and Nashville clubs, but for all of the hardwood associations of this district. This was the key struck at the smoker which was the final feature of entertainment devised by the Nashville lumbermen, and it was declared that the visit of the Louisville men marks a new era in club work in the hardwood producing district. The Louisville crowd was about sixteen strong, and made the trip in a special Pullman sleeper attached to the regular Louisville & Nashville trains. The lumbermen were met at the depot by the Nashville men, who took the visitors automobiling before breakfast. This was served at the Hermitage hotel. Following the meal a trip was made in autos to the lumber mills and flooring factories of the western end of the city. Lunch was enjoyed at the Commercial Club. The afternoon was given over to the business in other parts of Nashville, the lumbermen returning to the central part of the city in time for an elaborate dinner at the Commercial Club. Following this the visitors were given a box party at the Princess theater, and upon its conclusion were further entertained at a smoker at the Commercial Club, when oratory and story-telling were given an opportunity to become evident for the first time. The Louisville lumbermen were then taken to the depot in autos, and rolled into their berths at

midnight with the sense of having been "shown" that Nashville is a brand of hospitality no whit inferior to that of Louisville. The Nashville Club will shortly be asked to convene in Louisville. Edward L. Davis, president of the Louisville Club and Hamilton Love, head of the Nashville Lumbermen's Club, and with each other in tossing verbal bouquets in the direction of their respective organizations.

The Louisville Board of Trade has filed a formal complaint with the Interstate Commerce Commission, asking that the Louisville & Nashville be compelled to exchange switching facilities with other roads. Lumbermen, who are daily affected by the regulations of the Louisville & Nashville shutting out other lines on competitive business, are keenly interested in the progress of the complaint.

Harry E. Kline of the Louisville Veneer Mills, is chairman of the Point Improvement Association, composed of lumbermen and others who are seeking the construction of a dike around the northeastern portion of Louisville for the purpose of protecting the industries located there against the overflow of the Ohio river. The government has agreed to survey the Point and take the project under consideration. It is probable that the work will be done by joint expenditures on the part of the municipal and federal governments.

Continued advances in ash and plain oak have featured the local situation of late. The general belief among lumbermen, however, is that prices have about reached their limit, and that it will not be good policy to attempt to shove them much higher. Large consumers have arranged their year's work on the basis of prices current earlier in the season, and it would be hard on them and would probably affect consumption if quotations were increased to a great extent. The local lumbermen, as a rule, are willing to go ahead on the present basis and turn over as much lumber as possible.

J. E. Davis, vice-president of the Edward L. Davis Lumber Company, is now associated with that company actively, after having been at Hope, Ark., for several months. Mr. Davis was working on a timber tract there with the Ransom interests of Nashville, and was intending to operate a sawmill for the manufacture of the lumber. The plan now arranged, however, is to have the lumber cut by contract. Consequently Mr. Davis will not be compelled to maintain his residence at Hope, but will be able to devote his time to the Louisville situation.

The new resaw of the Norman Lumber Company at its Holly Ridge, La., mill has been started in operation. The company now expects to average 1,000,000 feet of lumber a month.

The Swann-Dav Lumber Company has announced plans for the erection of a large mill near McRoberts, in the recently opened up eastern Kentucky district. The company is said to have secured one of the finest bodies of timberland in that part of the state. It is principally poplar.

The C. C. Mengel & Bro. Company, mahogany manufacturer of Louisville, has increased its capitalization from \$1,700,000 to \$3,500,000, a total increase of \$1,800,000. The company's business has been growing rapidly, and the additional capital will be used to enable it to take care of expansions as they develop. No definite plans for improvements have been made, however.

← MILWAUKEE →

Louis Leidiger was elected president of the Merrill Veneer Company at the annual meeting of the directors this month. Napoleon Desrosier is vice-president, and W. A. Runge is secretary-treasurer.

The Badger Basket & Veneer Company of Burlington has been reorganized and the capital increased to enable the extension of the business along several lines. H. Wegwart, president, will become sales-manager. Ralph W. Story, secretary-treasurer, who recently purchased a one-third interest in the concern, has taken over the business management. An extension will probably be made to the factory this summer.

Another chair factory is to be erected in Sheboygan. The Sheboygan Couch Company has been incorporated for \$50,000 and contemplates erecting a large factory in that city for the manufacture of furniture.

Articles of incorporation have been filed by the Kuney-Parrette Lumber Company of Three Lakes. The concern has been incorporated by Charles T. Kuney, J. P. Parrette and R. L. Parrette with a capital stock of \$20,000.

Several carloads of machinery are being received by the owners of the new Peshtigo sawmill and it is being installed as rapidly as it is received. The structure is being rapidly completed, the open winter having permitted more work than usual.

The F. Eggers Veneer Company of Two Rivers, one of the world's largest veneer goods manufacturers, has acquired the plant of the defunct Plymouth Veneer Company of Plymouth. The two plants will be combined at Two Rivers.

The investigation in wood distillation, which has been carried on during the last three years at the United States Forest Products' Laboratory at the University of Wisconsin at Madison, is to be further developed by supplementary work at the University of Washington. Dr. L. F. Hawley of the Wisconsin laboratory has just returned from the Northwest where he co-operated with the Washington men in getting the investigations under way. The United States Forest Service has set aside \$10,000 for the work in the western state. Scientific data concerning the utilization of mill waste, of logging waste and of stunted forest growth is being obtained. The work will also be continued at Wisconsin.

Kraetzer-cureD LUMBER

¶ Kraetzer-Cured lumber is susceptible of being thoroughly kiln dried or air dried in less than one-third the time ordinarily required for seasoning unsteamed wood.

¶ Kraetzer-Cured lumber does not case-harden, check, end-split or stain, and dries without warping or buckling.

¶ Kraetzer-Cured lumber has a uniform tone of color. Its working qualities are greatly improved, and the beauty of the flake on quarter-sawed stock is enhanced.

¶ Kraetzer-Cured lumber dries out to materially less weight than unsteamed wood, ranging from 200 to 500 pounds per thousand feet.

¶ Kraetzer-Cured lumber will neither shrink nor swell, and the grain will not raise when water stains are employed in finishing.

¶ Kraetzer-Cured lumber is not impaired in strength or quality by the process.

¶ Kraetzer-Cured lumber is produced by the use of the Kraetzer Preparator, a steel cylinder permanently closed at one end and fitted at the other end with a quick-opening and closing steam-tight door, manufactured by

The Kraetzer Company 537 South Dearborn Street CHICAGO, ILL.

Kraetzer-Cured lumber is produced by the following well-known manufacturers:

John Schroeder Lumber Company.....Milwaukee, Wis.
Maple, Birch and Oak Flooring

Russe & Burgess, Inc.....Memphis, Tenn.
Red and Sap Gum, White and Red Oak

Bennett Hardwood Lumber Company.....Memphis, Tenn.
White and Red Oak, Red and Sap Gum, Sycamore and Cypress

Lamb-Fish Lumber Company.....Charleston, Miss.
Red and Sap Gum, White and Red Oak, Cypress

Santee River Cypress Lumber Co.....Ferguson, S. C.
White and Red Oak, Red and Sap Gum, White Ash

Forman-Earle Company.....Heidelberg, Ky.
Poplar, White Oak and White Oak Flooring

C. L. Willey.....Chicago, Ill.
Mahogany and all figured Foreign and Domestic Woods

New England Hardwood Co.....Mountain Mills, Vt.
Birch, Beech and Maple

Saline River Hardwood Company.....Pine Bluff, Ark.
White and Red Oak, Red and Sap Gum

Kraetzer-cureD LUMBER

The Hardwood Market

< CHICAGO >

Chicago trade is at present divided into two classes—those who have lumber to deliver and those who have not. It is not a question locally of selling stock, but entirely of buying. Stock sells and at good prices and, judging from the sentiment of most of the members and their expressed opinions of the situation, this status of affairs will continue for some little time. Most standard woods in both northern and southern stock are not only in active demand, but commanding a very satisfactory level of prices. Oak, of course, is predominant in demand, but, in keeping with the conditions in a great many other points, ash is another extremely active factor. Maple, birch, beech and other northern woods are moving actively.

The factory trade is good in Chicago. The mild weather of a couple of weeks ago started a number of building operations which have been checked for a short time by the cold weather immediately following. There is every reason to believe, however, that building business will be unusually active during the spring and summer months.

THREE STATES LUMBER COMPANY
Manufacturers of
SOUTHERN HARDWOODS
Cottonwood and Red Gum Specialties
MAIN OFFICE, MEMPHIS, TENNESSEE

CINCINNATI
Hardwood Manufacturers and Jobbers

CONASAUGA LUMBER CO.
MANUFACTURERS HARDWOOD AND PINE
FOURTH NATIONAL BANK BUILDING

WE SELL "SERVICE"

in connection with a full line
OF

Oak, Gum, Poplar, and other Hardwoods

If you appreciate "service," in all
its details, write, wire or phone

THE M. B. FARRIN LUMBER CO.

Richey, Halsted & Quick
HIGH GRADE SOUTHERN LUMBER

E. C. BRADLEY LUMBER CO.
HIGH GRADE WEST VIRGINIA HARDWOODS
GOERKE BUILDING

Johns, Mowbray, Nelson Company
OAK, ASH, POPLAR & CHESTNUT
GUM AND COTTONWOOD

C. CRANE & CO.
MANUFACTURERS HARDWOOD LUMBER
1739 EASTERN AVENUE

< NEW YORK >

Strong conditions still prevail in the local hardwood market, and there is no immediate prospect of slackening. Good lumber is hard to obtain and there is a large demand for all that finds its way into the market. The continued improvement in the matter of poorer grades is taken as an indication that the demand for lumber is healthy and will continue so. Such woods as have been leaders in this market are still in good call at high prices, with oak and ash leading the way. Buyers who stayed out of the market at the first signs of higher prices now realize that the advances have been genuine with the result that local stocks are low and the demand for actual needs is great enough to absorb all that comes in. Buyers returning from manufacturing points report low stocks, difficulties attending manufacture and high cost of stumpage, features which mean anything but a falling off in values.

< BUFFALO >

Hardwood dealers state that trade has been very satisfactory so far this month and most of them are selling quite a fair amount of lumber. Logging conditions in some localities have not been as favorable as they usually are in winter time, and this has had much to do with keeping up the price of stock. There is firmness almost everywhere in the list, with the prospect of this feature continuing. Some dealers feel that prices are not likely to work much higher than at present, but say that if they do it may lead to some curtailment of orders by manufacturers.

The chief wood in demand continues to be plain oak, with quartered showing more firmness than it did some weeks ago. Maple and birch are also holding up well. Brown ash is in better demand and is being used a good deal for crating purposes. Beech shows improvement and basswood has picked up somewhat. Poplar in most grades is also in better demand, and mills have but small stocks at present to offer.

< PHILADELPHIA >

A gradual strengthening of the hardwood market is noticeable during the last fortnight. Among the wholesale consuming industries buying continues active, and the large corporations especially are buying freely for ties and railroad timber. Boxmasters are working on increased orders, and the general outlook is promising for steady trading throughout the year, the paucity of material being the only difficulty. For the wholesaler without strong mill connections, the situation at the mill ends is not very encouraging, and the query "Can you deliver the goods?" is unfailingly made by the purchasing agent at this time. There is fear that the manufacturers may force values to a height that would act as a boomerang, apropos of which danger, many of the readers of HARDWOOD RECORD, have made the remark that the cartoon in the issue of Feb. 10 hits this particular nail squarely on the head. The respective positions of the hardwoods remain as previously reported. Plain oak continues the topper, with quartered oak forging rapidly to the front; ash holds firm; gum is strengthening; maple in good demand; birch makes new friends; mahogany and veneer market is active; beech, poplar and basswood are also in good call.

< PITTSBURGH >

Things are moving along at a very steady pace in lumber buying although the volume of business has not been quite so large on new orders as wholesalers anticipated. Yardmen have been a little bit slow in coming forward with their orders, as many of them think that lower prices can be secured later on. They are going to be badly mistaken in this idea. All quotations are held very firm on hardwoods, and stocks are scarce. Mills are not gaining any in supply. The impassable roads and the floods, together with car shortage, have made it uniformly difficult to get anything like a full quota of hardwood shipments this winter. Southern hardwoods are very firm in demand and export trade is reported good. The furniture and implement people are taking a large amount of stuff this winter and look for good business all the year.

< BALTIMORE >

None of the recent developments in the hardwood market have been such as to cause manufacturers and dealers to take a less favorable view of the situation or to cloud the outlook. The demand keeps up surprisingly well in practically all divisions of the business, with a wide range of prices. It cannot be said that any easing off has occurred. Consumers are evidently obliged to provide for large requirements and the hunt for lumber goes on so actively that the mills have been unable to accumulate considerable stocks. The tone of the market is rendered all the firmer, perhaps, by the fact that the almost bottomless state of the roads makes it very difficult to haul logs or to get lumber to railroad stations. This renders sawmill operations and the distribution of the output very difficult and tends appreciably to keep the range of prices firm. Oak is not only holding its own, but appears to show additional strength, the quotations at present being almost the highest ever realized in the trade.

The export movement is also brisk, notwithstanding the rather liberal

forwardings that have been made in recent months. On the one hand there are foreign buyers who warn against the danger of over-shipment and a declining market, and on the other the caution is expressed that with the quotations going higher the foreign buyers will be encouraged to employ substitutes. It is probable that the foreign movement has not assumed such proportions as to affect prices unfavorably, although part of this result must also be attributed to the increased requirements of the buyers abroad.

Poplar is holding its own, with extra wide lumber just a shade stronger than it has been, but with prices by no means satisfactory. The prevailing tendency is to use wide stocks more freely than has been the case, but the demand is not yet such as to insure for the manufacturers such returns as lumber of this kind should bring. All other hardwoods are in very acceptable shape, with the outlook encouraging and the free stocks hardly affording an adequate selection. Many inquiries are received from domestic buyers as well as from foreign countries, and gum especially is reported to show an improvement. Cypress is said to be easier, with the most pressing needs met, and the buyers now in a position to hold off a little and see what the near future may bring forth in the way of political and general business developments.

◀ BOSTON ▶

The hardwood lumber business has been checked somewhat by the materially higher prices that manufacturers and dealers are asking. All reports from manufacturing centers show that the offerings of hardwood lumber are small and in the majority of cases holders are very independent and will not make sales unless they obtain full asking prices. Buyers realize that today's market is firm and that the outlook shows no relief for some time to come, yet they will not purchase far ahead of their actual wants. Manufacturing consumers have been fairly busy, especially those making office furniture. Chair manufacturers have been exceptionally busy. The demand for interior finish has been excellent and mills in this section have been very busy. The demand for plain oak has shown quite a little increase of late, even though prices are higher. Quartered oak has been attracting quite a little more attention and prices are firm. The demand for maple is very good. Ash is attracting more attention.

◀ COLUMBUS ▶

Hardwood trade in central Ohio during the past fortnight has been active in every direction. The volume of business has been good and the price list is very firm. In fact, every change in quotations has been toward higher levels. The tone of the market is good and the future outlook believed to be excellent. The movement of the various grades has been uniform and as a result there has been no accumulation of stocks. The lower grades have shown the greatest strength, although there is a good demand for the upper grades, especially in oak and poplar. No trouble is experienced from a lack of cars.

Dry stocks are very scarce in every locality. As a result the price list remains firm. Mills have been making every effort to increase stocks, with the result that they have scarcely kept ahead of the demand. Dealers are buying well and so are the factories. Furniture concerns are good buyers since successful mid-winter exhibits.

Quartered oak is ruling firm and prices are high. Stocks are light. There is also a good demand for plain oak and recent advances have been recorded, especially in the better grades. Chestnut is one of the strongest points in the market. Poplar is strong and stocks are decreasing. Ash is moving better. Basswood is selling well and other hardwoods are firm.

◀ CINCINNATI ▶

Fine weather during the past week has been very favorable to the yardmen who are handling lots of lumber, both in-bound and out-bound. Trade conditions are very satisfactory; all wood consuming plants in the territory drawing supplies from this market are busy and well supplied with orders to insure a continuation for some time. All returning lumber salesmen after covering their territory do not hesitate to make this claim, and these trips are resulting in good bookings for both present and future shipment. The furniture trade is especially active at this time, and the implement manufacturers are very busy. Box factories are as busy as can be, and are constantly inquiring for suitable stock for their requirements. Planing mills are good users of stock and are working full time in an effort to get stocked up for early spring business. There are many inquiries for nearly every item on the hardwood list, and while quotations in answer to same are high, satisfactory results are being obtained.

The yellow pine and cypress dealers are all well pleased with the situation, having just about closed a very good year, and that right on the eve of the opening of another big building season. Mill prices are high and retailers are being urged to place orders liberally, but prefer to wait, expecting to find surpluses at mill points and thereby get some concessions. This is hardly likely as all mills are busy getting out export stock and railroad material for which there has been a very heavy demand all winter, and the yard stock produced at mills and remaining unsold at this time is very small, there being no accumulation. Therefore prices will remain firm for the present and advance as the season grows.

Plain oak is much the strongest on the hardwood list, and as high in price as dealers can remember. All grades in oak are so scarce as to cause some apprehension. Thick oak also is quoted high and is hard to buy. Yellow pines and grades of ash are selling well. Quartered oak is doing nicely and prices are very firm. All low grades suitable for boxes are in active demand with low stocks to draw supplies from; top prices are asked for this stock. Chestnut is in active demand at satisfactory prices for all grades, 6-4 sound wormy being most inquired for. Maple is in great demand and is becoming one of the strong items on the list. Cottonwood is also greatly improved in upper grades, while the No. 2 and 3 common grades are very hard to locate and are bringing stiff prices. Hardwood flooring is quite active for this time of the year, and prices are satisfactory, with indications of advances, which are necessary owing to the increasing price of rough lumber.

The increasing demand for good grades of poplar is very encouraging to dealers who have held good sized stocks waiting for a change in conditions. Low-grade stock is as scarce as ever and prices are very strong. Dealers believe now that there will be a good market for No. 1 com-

TIMBER ESTIMATES

REPORTS INCLUDED
TOPOGRAPHICAL MAP, DETAIL ESTIMATES & WRITTEN REPORT

GARDNER & HOWE

ENGINEERS

Clarence W. Griffith Department Manager, Porter Building, Memphis, Tenn.

Bluestone Land & Lumber Company

MANUFACTURERS

WEST VIRGINIA HARDWOODS

Soft White Pine, Oak, Poplar, Chestnut, Hemlock

Band Sawed Stock RIDGWAY
COMPLETE PLANING MILL FACILITIES PENNSYLVANIA

CINCINNATI

Hardwood Manufacturers and Jobbers

SHAWNEE LUMBER CO.

HARDWOODS, WHITE PINE and HEMLOCK

Sales Office—South Side Station—C. H. & D. R. R.

RIEMEIER LUMBER CO.

OAK, POPLAR, CHESTNUT
SUMMERS AND GEST STREETS

JAMES KENNEDY & CO., Ltd.

OAK, POPLAR AND OTHER HARDWOODS
FIRST NATIONAL BANK BUILDING

The Kosse, Shoe & Schleyer Co.

WALNUT, OAK, AND OTHER HARDWOODS
103-4-5 CAREW BUILDING

OHIO VENEER COMPANY

Manufacturers & Importers FOREIGN VENEERS
2624-34 COLERAIN AVENUE

CHARLES F. SHIELS & CO.

SPECIALISTS IN WIDE STOCK
POPLAR, OAK, CHERRY, BIRCH

GEORGE LITTLEFORD

RED CEDAR, CHERRY
OFFICE: 1263 RICHMOND STREET

SWANN-DAY LUMBER CO.

Mfrs. YELLOW POPLAR and WHITE OAK
SALES OFFICE—SECOND NATIONAL BANK BUILDING

Keys-Walker Lumber Co.

MANUFACTURERS

West Virginia Hardwoods Soft Yellow Poplar

Oak—Chestnut—Bass—Hemlock, Etc.

Rough or Dressed

Write for Prices

ROANOKE, VIRGINIA

On the Following Stock We Will Make Special Prices for Prompt Shipment:

62,000 ft. 1½" No. 2 Common Poplar.	69,000 ft. 1½" S. W. and No. 2 Com. Chestnut.
91,000 ft. 2" No. 2 Common Poplar.	522,000 ft. 1½" S. W. and No. 2 Com. Chestnut.
10,000 ft. 1½" No. 1 and 2 Qld. Poplar.	40,000 ft. 1x12" and up No. 1 and 2 Chestnut.
45,000 ft. 1x24" and up No. 1 and Panel Poplar.	49,000 ft. 1" No. 1 Com. Chestnut.
30,000 ft. 3x8 to 20 No. 1 and 2 Poplar.	33,000 ft. 1½" No. 1 Com. Chestnut.
15,000 ft. 4x18 and up No. 1 and Panel Poplar.	41,000 ft. 1½" No. 1 Com. Chestnut.
55,000 ft. 5/8x18" and up No. 1 and Panel Poplar.	32,000 ft. 2" No. 1 Com. Chestnut.
154,000 ft. 1" S. W. and No. 2 Com. Chestnut.	45,000 ft. 1½" No. 2 Plain Oak.
	198,000 ft. 2" No. 2 Com. Plain Oak.
	60,000 ft. 1½" No. 1 Com. Plain Oak.

The Atlantic Lumber Co.

70 Kilby Street, Boston, Mass.

TIMBER TALKS

Looking Backward, 1918

I COULD have bought that tract of timber in 1913. It was offered at a low price on an estimate showing the quantity of lumber it would have produced had it been cut at that time. It is worth double that price or more today and through closer utilization it will produce one-third more in values than it would have under methods then in vogue. That would have been at least

166 per cent. in five years

Five years from now what will your conclusion be?

"I am glad I bought it,"

Or

"I wish I had bought it?"

If you live in the present, if you are interested in present opportunities rather than in reviewing those of the last decade, your conclusions will be "I am glad I bought it."

If you are a member of the Ancient and Slothful Order of Hindsighters you will tell future generations what might have happened, if—

James D. Lacey & Company Timber Land Factors

Chicago, 1750 McCormick Building
Portland, 1104 Spalding Building
Seattle, 1009 White Building

mon and better all this year, and also that wide stock will be in greater demand than for some time.

There is a splendid demand for all low grades of cypress, and good prices are being obtained. Planing mills are fair buyers of the better grades, but the heavy demand for this class of material will not come for about thirty days when dealers expect a very good business. No. 1 shop in all thicknesses is in good demand and growing stronger. Dressed stock for building purposes and hard stock is a little slow at this time, but the numerous inquiries for this stock is evidence of early buying. Prices are quite satisfactory.

< TOLEDO >

The hardwood market continues strong. Low grades are in heavy demand, crating and boxing materials being practically out of the local market. Oak continues a leader, with white ash a good second. Low-grade basswood is being called for and shows unusual strength, while firsts and seconds are slow. Hickory continues fairly strong. The demand for hardwoods seems to be greatest from Ohio and Michigan territory although inquiries are general and hardwood men are a unit in the opinion that the coming summer will prove one of the strongest seasons known on this market for many a long day. Building plans continue and embrace some immense work, both municipal and investment. Residence building has continued all winter, and it is believed that the coming season will embrace fully as much work as the season just past, which was the biggest known in this city. Sash and door factories, hardwood flooring concerns and column manufacturers are running their factories heavily for the season of the year and are making large plans for the summer business.

< INDIANAPOLIS >

There has been no material change in the hardwood market in this vicinity in the last two weeks. Business has been good and somewhat better than for the corresponding period of last year.

Prices continue stiff in all grades with no indications of any early reduction. All grades of oak are in special demand and the prices are much stronger than a year ago. There are many inquiries, which give promise of some nice contracts within the next few weeks. Most of the local hardwood concerns appear to have fairly ample stock on hand.

< MEMPHIS >

Business in hardwood circles is good and the movement of lumber is quite large. The demand is relatively better for the lower grades of cottonwood and gum and all grades of plain oak than for the other items. Offerings are rather scarce and this accounts for the fact that prices are so firmly held. There is scarcely a large buyer in the market for any one of the items who is able to secure prompt shipment of his needs. The movement of quarter sawn oak is fairly free and a satisfactory business is reported in ash. The upper grades of cottonwood are not as active as the lower but they are in reasonably good request. Red gum is in pretty good demand in all descriptions with the exception of 4/4. This is slow, as has been the case for some time. Sap gum is wanted at pretty full prices. Cypress is in good demand and indications are that there will be an active business in this lumber during the remainder of the spring, as building operations throughout the country are quite large. The demand for American hardwoods on the part of European importers and consumers is quite good and a large amount of lumber is being sent from Memphis to foreign markets. A considerable portion of the demand for plain oak is for export.

< BRISTOL >

Lumbermen of Bristol and this section report the lumber business as brisk. The unusually mild winter has enabled the mills to turn out much more stock than usual for the season of the year. The roads have been in fair condition and there has been much more hauling of logs and lumber than usual. Trade is better than for a long while, and the hardwood dealers say that the outlook is most encouraging. Further advances in prices are expected. The belief of the lumbermen here is that business will continue to improve rapidly during the spring and summer. They do not believe that the shifting political situation nor the prospects of tariff legislation will injuriously affect trade.

< LOUISVILLE >

Extremely favorable conditions now exist in the hardwood field, judging from the experience of local lumbermen. The demand is strong and general, prices are good, with a decidedly upward tendency, and stocks are in fair shape, though of course badly broken by the brisk demand along certain lines. Plain oak, for example, has not been allowed to accumulate, and any lumberman with an odd car or two of dry stock is usually able to dispose of it without any effort. Quartered oak is also improving, both the demand and the price being somewhat better than heretofore. The poplar situation is also better, for while good poplar is not particularly strong, common grades are moving briskly. There is an improved demand for wide poplar from carriage and automobile builders, and though the latter have been using metal to a large extent, it is beginning to look as if the automobile manufacturers are inclining

toward wood again, and consequently toward the use of poplar. If this turns out to be the case, there ought to be another boom in poplar such as happened a few years ago. The demand for ash is so great that the supply is altogether insufficient to take care of the wants of consumers. Car-builders particularly are buying it in quantity, and many customers are asking that shipments be made green from the saw. The outlook is for continued good trade. Everybody in the business world seems to have forgotten about March 4, and the belief here is that the change of administration will be accompanied by little or no uneasiness on the part of business at large.

◀ ST. LOUIS ▶

A very good trade condition is reported by the St. Louis hardwood dealers although the severe winter weather of the past several days has prevented the volume of business that was expected. In spite of this, however, the demand is most satisfactory. Oak and ash head the list as to demand, with cottonwood, gum and cypress following very closely. Poplar, No. 1 common and better grades, is not being called for very freely. Other items are in fair demand. Reports from the producing territory in the South continue to be most discouraging as to conditions. There has been much rain, which has prevented logging and if the present weather continues for any length of time, the cut for the first half of the year will fall much below the requirements. Dry lumber is exceedingly scarce at the mills, and this is most encouraging to the local dealers who have nice stocks on hand, as it will greatly enhance the values. As to cypress, there is a seasonable degree of activity being shown and prices are remaining steady and firm. St. Louis distributors are well pleased with the amount of business they are doing and the outlook. The demand from the northern territory is expected to increase as soon as the weather becomes more pleasant. Orders for factory stock are reported as most satisfactory.

◀ MILWAUKEE ▶

The unusually favorable weather in Wisconsin is proving an important factor in the hardwood business. Active building operations are under way, not only in Milwaukee, but all over the state. Farmers have been making the most of their opportunity to catch up with much delayed building, while there is also much activity in the smaller cities and towns about the state.

The shortage of stocks at the northern mills, especially in upper grade dry stocks, is causing considerable inconvenience. Wholesalers are forced to continually postpone delivery on orders. Stocks in the birch and maple line are particularly low and prices have made several gains during the past few weeks. Basswood, ash and elm are in good request, with stocks not especially large. Reports from the northern mills say that it is some time since stocks have been so low, and most of the concerns are behind on orders. The supply of plain and quarter-sawn oak is light and everything in No. 1 and No. 2 inch plain oak is absorbed as soon as it is ready to ship. Reports of flood damage in the South have sent prices up again.

All the local manufacturing plants, including the sash and door concerns, interior woodwork plants and the furniture factories, are placing some fairly good orders. Stocks on hand at most of these plants are light, and it is only fair to suppose that they will be forced to buy rather freely from now on, that they may be in readiness for the spring rush that now seems inevitable.

◀ GLASGOW ▶

The continuation of the carters' strike is responsible for business being decidedly quiet in the west of Scotland during the past fortnight, but once it is over, there should be a return of the active conditions existing of late. Many of the large works have been compelled to close down, through inability to get supplies. Some wood is being delivered, but this is applicable only to deliveries out of town. In these cases it is possible to get wagons alongside the quay and loaded.

The imports of birch logs so far this season have been disposed of, and the demand still continues active. Birch planks are also in good request, but until the present, arrivals have been few. Imports of wagon oak planks, which have been on a fairly liberal scale recently, are being readily absorbed, showing a continuance of the good condition of this branch. The steady movement in mahogany, oak, canarywood and gum is still maintained, and the consignments now about due should do well.

The shipbuilding industry is still largely responsible for the movement in evidence, and extensive demands are certain to emanate from this source for a considerable time to come yet, so much so that it is already being prophesied that another record year's output will eventuate, provided no serious labor troubles interfere. The prosperity of shipbuilding on the Clyde has been most phenomenal, and it is gratifying to think that the Clyde has surpassed all records in shipbuilding and marine general. The report show the output of the Clyde district equal to that of the whole north of England put together, exceeding that of Germany, and almost double that of the United States.

Quebec shippers have now put in their annual appearance in quest of contract business, but very little business has resulted. Some of the larger buyers have still quite a quantity of last season's import, so that there is little likelihood to contract at the current level of values.

Mahogany

In Veneers and Lumber

That is Mahogany

¶ Right now we can offer to the discriminating buyer a comprehensive stock of as fine Mahogany Veneers as have ever been produced.

¶ These Veneers are made from both Cuban and African wood; were cut from the pick of the choicest logs obtainable, and show a remarkable variety of figure of the most alluring character.

¶ In Circassian Walnut we can offer an equally attractive line of veneers, in fact, such a line of Circassian in character of wood, figure and manufacture as has never been equaled.

¶ In solid Cuban wood, largely four-quarter in thickness, we have a limited stock of exceptional character.

¶ At this time the Willey Mahogany and Circassian holdings in lumber and veneers are by far the best that can be shown in the United States.

¶ Intending purchasers of any kind of Foreign or Domestic figured woods and veneers are cordially invited to visit the Willey mills, and veneer and lumber warehouses, on Robey Street near Blue Island Avenue.

¶ Ready access can be had to the plant by taking a Blue Island Avenue car at the postoffice on Dearborn Street and alighting at Robey Street.

C. L. WILLEY, Chicago

Largest Mahogany Veneer and Lumber Producing Plant in the World

W H Y ?

WHY DO more than 320 of the most prominent and successful lumber manufacturers exchange nearly \$26,000,000 of indemnity against fire loss at

Manufacturing Lumbermen's Underwriters

B E C A U S E !

BECAUSE it is the oldest and strongest inter-insurance association among lumbermen, being now in its fourteenth year.

BECAUSE \$728,910.41 cash savings have been returned to members.

BECAUSE \$756,787.21 cash surplus, owned entirely by the members, has been accumulated.

BECAUSE \$2,012,427.96 has been paid in losses under prompt and equitable adjustments without resort to quibbling or technical controversy.

BECAUSE it was the first to settle lumber losses on a market value basis.

BECAUSE the regular, frequent and thorough inspections given the plants of all members help them to prevent fires, thus materially reducing both the fire waste and the cost of indemnity.

FOR FULL PARTICULARS ADDRESS

Western Representative
HARRY B. CLARK,
Portland, Ore.

Harry Rankin & Co.

Attorney in Fact,
KANSAS CITY, MO.

Advertisers' Directory

NORTHERN HARDWOODS.

American Lumber & Mfg. Co.....	12
Beecher & Barr.....	13
Buffalo Hardwood Lumber Co.....	67

Cartier-Holland Lumber Company..	2
Coale, Thos. E., Lumber Company..	12
Cobbs & Mitchell, Inc.....	3
Craig, W. P., Lumber Co.....	13
Curll, Daniel B.....	13

Darling, Chas. & Co.....	57
--------------------------	----

East Jordan Lumber Company.....	66
Elias, G., & Bro.....	67
Estabrook-Skeele Lumber Co.....	4

Flanner-Steger Land & Lumber Co.	66
Forman, Thos., Company.....	66

Goodyear, C. A., Lumber Co.....	60
---------------------------------	----

Hanson-Turner Company.....	62
Heyser, W. E., Lumber Co.....	11
Holyoke, Chas.....	12
Holloway Hardwood Lumber Co.....	2

Jones Hardwood Company.....	13
-----------------------------	----

Kent, J. S., Company.....	12
Klann, E. H.....	57
Kneeland-Bigelow Company, The....	3
Litchfield, William E.....	13

McIlvain, J. Gibson, & Co.....	2
McLean, Hugh, Lumber Co.....	67
McParland Hardwood Lumber Co....	57
Miller, Anthony.....	67
Mitchell Bros. Company.....	3
Mowbray & Robinson Company.....	11

Osgood & Richardson.....	57
--------------------------	----

Palmer & Parker Co.....	12
-------------------------	----

Sawyer-Goodman Company.....	60
Smith, Fred D.....	57
Standard Hardwood Lumber Co.....	67
Stearns Salt & Lumber Company.....	8
Stephenson, I., Company, The.....	66
Stewart, I. N., & Bro.....	67
Stimson, J. V., & Co.....	64
Struthers Cooperage Company.....	67
Sullivan, T. & Co.....	67

Taylor, W. R., Lumber Company.....	12
Tegge Lumber Co.....	12

Vinke, J. & J.....	13
VonPlaten Lumber Co.....	66

Webster, George, Lumber Company.	13
White, Wm. H., Co.....	68
Wiggin, H. D.....	12
Williams, Ichabod T., & Sons.....	14
Willson Bros. Lumber Company.....	12
Wistar, Underhill & Nixon.....	12
Wood-Mosaic Company.....	13

Yeager, Orson E.....	57
Young, W. D., & Co.....	3

POPLAR.

Anderson-Tully Company.....	9
Atlantic Lumber Company.....	52
Farrin, M. B., Lumber Company.....	50
Faust Bros. Lumber Company.....	14
Keys-Walker Lumber Company.....	53
Logan, J. M., Lumber Co.....	6
Maphet & Shea Lumber Company...	6
Radina, L. W., & Co.....	11

Swann-Day Lumber Company.....	51
Vansant, Kitchen & Co.....	68
West Virginia Timber Company.....	7
Whiting, Wm. S.....	65
Wood, R. E., Lumber Company.....	13
Yellow Poplar Lumber Company....	68

SOUTHERN HARDWOODS.

American Lumber & Mfg. Co.....	12
Anderson-Tully Company.....	9
Atlantic Lumber Company.....	52

Baker-Matthews Mfg. Co.....	65
Bennett & Witte.....	11
Bluestone Land & Lumber Co.....	51
Boice Lumber Company.....	64
Booker-Cecil Company.....	5
Bradley, E. C., Lumber Company.....	50
Brown, W. P., & Sons Lumber Co....	5
Buffalo Hardwood Lumber Co.....	67

Carrier Lumber & Mfg. Co.....	14
Cherokee Lumber Co.....	7
Coale, Thos. E., Lumber Company.....	12
Conasauga Lumber Company.....	50
Crane, C., & Co.....	50
Curll, Daniel B.....	13

Darling, Chas., & Co.....	57
Davis, Edward L., Lumber Company	5
Dempsey, W. W.....	65
Duhlmeier Brothers.....	11

Elias, G., & Bro.....	67
Estabrook-Skeele Lumber Co.....	4

Farrin, M. B., Lumber Company.....	50
Faust Bros. Lumber Co.....	14
Flanner-Steger Land & Lumber Co.	

Garetson-Greaseon Lumber Co.....	65
Heyser, W. E., Lumber Company.....	11
Hill Brothers Tie & Lumber Co.....	65
Himmelberger-Harrison Lumber Co.	65
Holloway Hardwood Lumber Co.....	2
Huddleston-Marsh Lumber Co.....	13
Jones Hardwood Company.....	13

Johns-Mowbray-Nelson Company..	50
Kennedy, James, & Co.....	51
Kent, J. S., Company.....	12
Keys-Walker Lumber Co.....	52
Kimball & Kopcke.....	6
Klann, E. H.....	57
Kosse, Shoe & Schleyer Company...	51

Lamb-Fish Lumber Co.....	8
Litchfield, William E.....	13
Littlefield, George.....	51
Little River Lumber Company.....	68
Logan, J. M., Lumber Co.....	6
Louisiana Long Leaf Lumber Co....	64
Louisville Point Lumber Company..	5

Maley, Thompson & Moffett Co.....	11
Maphet & Shea Lumber Company...	6
McIlvain, J. Gibson, & Co.....	2
McLean, Hugh, Lumber Co.....	67
McParland Hardwood Lumber Co....	57
Miller, Anthony.....	67
Mowbray & Robinson Company.....	11

Norman Lumber Company.....	5
Ohio River Saw Mill Company.....	5
Osgood & Richardson.....	57

Paepoke-Leicht Lumber Company..

Radina, L. W., & Co.....	11
Ransom, J. B., & Co.....	7
Riemeier Lumber Company.....	51
Richey, Halsted & Quick.....	50
Russe & Burgess, Inc.....	14

Salt Lick Lumber Company.....	65
Shawnee Lumber Company.....	51
Shiels, Chas. F., & Co.....	51
Slaymaker, S. E., & Co.....	49
Smith, Fred D.....	53
Standard Hardwood Lumber Co.....	67
Stewart, I. N., & Bro.....	67
Stimson, J. V., & Co.....	64
Sullivan, T. & Co.....	67
Swann-Day Lumber Company.....	51

Tennessee Hardwood Lumber Co....	7
Three States Lumber Company.....	50

Vestal Lumber & Manufacturing Co.	6
Vinke, J. & J.....	13
Von Platen Lumber Co.....	66

Webster, George, Lumber Company.	13
West Virginia Timber Company.....	7
Whiting, Wm. S.....	65
Whitmer, Wm., & Sons.....	12
Wiggin, H. D.....	12
Williams, Ichabod T., & Sons.....	14
Willson Bros. Lumber Company.....	12
Wistar, Underhill & Nixon.....	12
Wood-Mosaic Company.....	13
Wood, R. E., Lumber Company.....	13
Yeager, Orson E.....	67

VENEERS AND PANELS.

Adams & Raymond Veneer Co.....	61
Ahnapee Veneer & Seating Co.....	62
Astoria Veneer Mills & Dock Co....	63
Central Veneer Company.....	61
Hanson-Turner Company.....	62
Hoffman Bros. Company.....	61
Huddleston-Marsh Lumber Co.....	65
Jarrell, B. C., & Co.....	61
Kentucky Veneer Works.....	61
Kiel Wooden Ware Company.....	62
Knoxville Veneer Company.....	6
Louisville Veneer Mills.....	5
Maley, Thompson & Moffett Co.....	11
Mengel, C. C., & Bro. Company.....	51
Ohio Veneer Company.....	12
Penrod Walnut & Veneer Co.....	52
Putnam Veneer and Lumber Co.....	63
Rayner, J.....	4
Rice Veneer & Lumber Company.....	61
Southern Veneer Manufacturing Company.....	63
Underwood Veneer Company.....	63
Veneer Manufacturers' Company....	51
Walker Veneer & Panel Co.....	57
Willey, C. L.....	53
Williams, Ichabod T., & Sons.....	14
Wisconsin Seating Company.....	62
Wood-Mosaic Company.....	13

MAHOGANY, WALNUT, ETC.

Astoria Veneer Mills & Dock Co....	63
Duhlmeier Brothers.....	11
Huddleston-Marsh Lumber Co.....	65
Littlefield, George.....	51
Maley, Thompson & Moffett Co.....	11
Mengel, C. C., & Bro. Company.....	51
Palmer & Parker Co.....	12
Penrod Walnut & Veneer Co.....	61
Purcell, Frank.....	65
Rayner, J.....	4

Struthers Cooperage Company.....	
Wiley, C. L.....	53
Williams, Ichabod T., & Sons.....	14

HARDWOOD FLOORING.

Beecher & Barr.....	13
Carrier Lumber & Mfg. Co.....	14
Cobbs & Mitchell, Inc.....	3
Eastman, S. L., Flooring Co.....	66
Farrin, M. B., Lumber Company.....	50
Forman, Thos., Company.....	66
Kerry & Hanson Flooring Co.....	66
Louisiana Long Leaf Lumber Co....	64
Mitchell Bros. Company.....	3
Robbins Lumber Co.....	60
Salt Lick Lumber Company.....	65
Stearns Salt & Lumber Company....	8
Stephenson, I., Company, The.....	66
Webster Lumber Co., George.....	13
White, Wm. H., Co.....	68
Wilce, T., Company, The.....	4
Young, W. D., & Co.....	3

WOODWORKING MACHINERY.

Cadillac Machine Co.....	58
Linderman Machine Co., The.....	
Mershon, W. B., & Co.....	59
Phoenix Manufacturing Co.....	59
Saranac Machine Company.....	59
Steinmetz, C. M.....	13
Westinghouse Electric & Mfg. Co..	

LOGGING MACHINERY.

Baldwin Locomotive Wks.....	
Clyde Iron Works.....	58
Lidgerwood Mfg. Co.....	58
Russel Wheel & Foundry Co.....	

DRY KILNS AND BLOWERS.

Grand Rapids Veneer Works.....	66
Kraetzer Company, The.....	49
Phila. Textile Mch. Co.....	12

SAWS, KNIVES AND SUPPLIES.

Atkins, E. C., & Co.....	
Simonds Mfg. Co.....	

LUMBER INSURANCE.

Central Manufacturers' Mut. Ins. Co.	
Epperson, U. S.....	5
Indiana Lumbermen's Mut. Ins. Co..	11
Lumber Mutual Fire Insurance Co..	5
Lumbermen's Mutual Ins. Co.....	51
Lumbermen's Underwriting Alliance	
Lumber Underwriters.....	14
Pennsylvania Lumbermen's Mutual Fire Ins. Co.....	61
Rankin, Harry & Co.....	54

TIMBER LANDS.

Lacey, James D., & Co.....	52
Spry, John C.....	4

TIMBER ESTIMATORS

Griffith, Clarence W.....	51
McDonald, Thos. J.....	56

MISCELLANEOUS.

Astoria Veneer Mills & Dock Co....	63
Childs, S. D., & Co.....	57
Gerlach, The Peter, Company.....	57
Kraetzer Company, The.....	49
Lumbermen's Credit Association....	4
Mechanical Rubber Company.....	59
Tamms Silica Company.....	57
Wausau Advancement Association..	60
Westinghouse Electric & Mfg. Co..	

CLASSIFIED ADVERTISEMENTS

Advertisements will be inserted in this section at the following rates:

For one insertion.....20c a line
For two insertions.....35c a line
For three insertions.....50c a line
For four insertions.....60c a line

Eight words of ordinary length make one line. Heading counts as two lines. No display except the headings can be admitted.

Remittances to accompany the order. No extra charges for copies of paper containing the advertisement.

EMPLOYES WANTED

WANTED FOREMAN

For Hardwood Flooring plant. Must be able to handle men and know the flooring business. Address, "BOX 26," care HARDWOOD RECORD.

EMPLOYMENT WANTED

WANTED—EMPLOYMENT

When you want a salesman for New York state territory, write us. We can supply you with a good man. EMPIRE STATE ASSOCIATION of Wholesale Lumber & Sash & Door Salesmen. Chas. Johnson, Sec'y, 96 Kirkland Rd., Rochester, N. Y.

TIMBER ESTIMATING

TIMBER ESTIMATES

Estimating Southern timber a specialty. Maps, detailed reports as to stand, quality and logging conditions. Have a few high-class properties for sale. Can furnish best references.

THOS. J. McDONALD,
East Tenn. Natl. Bank Bldg.,
Knoxville, Tenn.

WAGON STOCK WANTED

I AM IN THE MARKET FOR

75 to 100 cars of oak poles, bolsters, sand boards, eveners, and reaches; and hickory and maple axles. Will inspect at shipping point, and pay cash. E. B. BROWN, 372 Bayne St.,

Buffalo, N. Y.

LOGS WANTED

WANTED—BLACK WALNUT LOGS

500 cars good black walnut logs, 10" and up in diameter, 6 ft. and up long. Will inspect at shipping point and pay cash.

GEO. W. HARTZELL, Dayton, Ohio.

WANTED—HARDWOOD LOGS

200,000 ft. 28" and up White Oak logs.
200,000 ft. 12" and up Walnut logs.
50,000 ft. 12" and up Cherry logs.
C. L. WILLEY, 2558 S. Robey St., Chicago.

TIMBER LANDS FOR SALE

FOR SALE—BY THE OWNER

30,000,000 ft. hardwood. 75% red gum, balance mixed oak, cypress, ash and elm. This is a bona fide proposition. R. R. within ½ mile of the timber. Water transportation available. BOX 371, Memphis, Tenn.

FOR SALE—15 MILLION FEET CYPRESS

A tract of extra large choice cypress. Have detail cruise. Located on navigable river and trunk line of railroad. Near deep water port. Address, OWNER, Box 512, Brunswick, Ga.

TIMBER SALE!

20 acres; extra good. Bids opened March 26, Union National Bank, Muncie, Indiana. Address WILLIAM W. SPANGLER, Auburn Jet., Ind.

FOR SALE—40,000 ACRES

Original growth hardwood Virginia forest; Oak, Poplar, Chestnut, Walnut, Hickory, Basswood and Hemlock.

M. T. BANTA & CO., Staunton, Va.

FOR SALE—1375 ACRES OF TIMBER

Close to the "Forks" of the Ontonagon River, in Ontonagon Co., Mich. This is mostly a cedar proposition and could nicely be lumbered and floated down the river. Balance of timber pine, birch, basswood, elm, ash, spruce and hemlock. Also have 400 acres of hardwood virgin timber located in Iron Co., Mich. Address A. P. HUELLMANTEL, Traverse City, Mich.

FOR SALE

700 acres of well timbered land, consisting chiefly of Southern poplar, hickory and other hardwoods, near Manchester, Tenn. Land is underlaid with coal. Will sell timber only, or timber and land together. K. MCKENZIE, Owner, 619 Andrus Bldg., Minneapolis, Minn.

ARE YOU INTERESTED IN GUM and Red Oak?

I own in fee simple two small and carefully selected tracks of high-class gum and red oak stumpage. Will sell at price to make the buyer good money either as an investment or as an operating proposition.

Will deal with principals only. Address in confidence, "BOX 22," care HARDWOOD RECORD.

TIMBER INVESTORS

One hundred pieces timber located all parts United States. For complete list, write J. J. CRANDALL & SON, Wellsville, N. Y.

TIMBER LANDS WANTED

WANTED TO BUY

400 or 500 acres of good hardwood timberland, mostly oak and ash, suitable for bending purposes. Address

"BOX 125," care HARDWOOD RECORD.

TIMBER WANTED

WANTED—CROSS TIES

for treatment, 7" thick, 8½' long, sawed, pole and hewn. Red, pin, black, yellow oaks, hard maple and birch. For further particulars write

R. A. BURY, Asst. Gen. Tie Agent,
N. Y. C. Lines, Detroit, Michigan.

LUMBER FOR SALE

MICHIGAN MAPLE

130 M 6/4 all grades Hard Maple.
57 M 8/4 all grades Hard Maple.
65 M 6/4 No. 1 common & better Soft Maple.
10 M 8/4 No. 1 common & better Soft Maple.
Band sawed, dry stock; good lengths and widths. Write for delivered prices.
THE BROWNLEE-KELLY CO., Detroit, Mich.

FOR SALE

1 car 3" and 4" FAS and No. 1 com. Indiana Basswood. 10 to 60 days old.
C. C. SHAFER, South Bend, Ind.

OAK, POPLAR, ASH

and all other hardwoods, in all grades and thicknesses, can be readily sold if advertised in the Wanted and For Sale section of HARDWOOD RECORD. If you have a large stock you want to sell try a few lines in this department and see what a lot of inquiries they will bring you.

FOR SALE

Car Curly Poplar, largely 4/4.
2 cars 4/4 No. 1 Common Poplar
3 cars 8/4 No. 2 Common Poplar
Address P. O. BOX 174, Hickory, N. C.

DIMENSION STOCK FOR SALE

FOR SALE

CLEAR GUM SQUARES.

2,000 pieces 2x2—20".
2,500 pieces 2x2—24".
400 pieces 2x2—28".
5,000 pieces 2x2—32".
2,000 pieces 2x2—36".

CLEAR OAK SQUARES.

300 pieces 2x2—24".
700 pieces 2x2—32".
1,100 pieces 2x2—48".
Gum squares @ \$14.00 per M ft. F.O.B. my mill.
Oak squares @ \$17.00 per M ft. F.O.B. my mill.
This stock has been on sticks from 2 to 8 months. J. G. OPITZ, Haskell, Ark.

DIMENSION STOCK WANTED

WANTED—TWO CARS EACH:

1x3x16
1x2¼x16
1x1x16

THE NORTHERN CHAIR CO., Grafton, Wis.

WANTED

1" Oak dimension stock, 3½ and up random width, 34½ and 44" long. One face clear. Also 1½x2x46" clear Oak Posts. JACOB JAECKLE FURN. CO., Buffalo, N. Y.

WANTED

DIMENSION OAK Plain and Quartered

Various sizes for chair and table factories. Send to us for specifications and prices.

INDIANA QUARTERED OAK CO.

7 East 42nd Street,
New York.

LUMBER WANTED**WANTS RED AND WHITE OAK**

A Canadian manufacturing company is in the market for a quantity of plain Red and White and quarter-cut White Oak, 3/4 to 8/4, and will contract for entire cut in these woods in No. 2 common and better grades from either small or large mills. Send particulars of quantity and where located, and best price f. o. b. cars at shipping point. Address, "BOX 24," care HARDWOOD RECORD.

WANTED

100,000 feet 3" FAS and No. 1 com. Hard Maple, green or dry. Box 457, South Bend, Ind.

WANTED

Hickory in car lots. Suitable for making handles. Specify percentage of whitewood, and quote price to ST. MARYS WOOD SPECIALTY CO., LIMITED, St. Marys, Ontario, Canada.

BUYERS OF HARDWOODS.

Do you want to get in touch with the best buyers of hardwood lumber? We have a list, showing the annual requirements in lumber, dimension stock and veneers and panels of consumers of those materials throughout the United States and Canada. The service is free to advertisers in the Record. It will interest you. Write us for further information about our "Selling Lumber by Mail System."

HARDWOOD RECORD, Ellsworth Bldg., Chicago.

BUSINESS OPPORTUNITIES**LOOK—LOOK—LOOK**

For Sale—A Model Furniture Factory at a bargain price. The property is located in the thriving city of Poughkeepsie; is now being used as a chair factory; is fully equipped with wood-working machinery and in good condition. Will be sold as a going business or otherwise as purchaser may desire. Apply direct to KAAL ROCK CHAIR CO., P. O. Box 378, Poughkeepsie, N. Y.

EXCELLENT OPPORTUNITY

For man to go in manufacturing business. Have well-equipped hardwood factory suitable for making spokes and vehicle stock. Healthy location in town six thousand, on two rivers and two railroads. Address

"BOX 72," care HARDWOOD RECORD.

MACHINERY FOR SALE**FOR SALE**

- 1 Berlin band resaw No. 284.
- 1 Joiner attachment for same.
- 1 Berlin double surfacer No. 177.
- 1 Berlin single inside moulder No. 15.
- 1 Berlin twin matcher No. 46.
- 1 Circular bevel siding resaw, Fay & Egan No. 1.
- 1 Fay & Egan 9" outside moulder No. 181.
- 1 8" Smith inside moulder.

The above machinery all in strictly first-class condition and modern. Offering for sale on account of change in our product. Will be sold cheap for cash. For further particulars address YELLOW POPLAR LBR. CO., Coal Grove, O.

FOR SALE CHEAP

One No. 88 new Berlin matcher. Inquire of GEO. E. SPRY, 1003 Harris Tr. Bldg., Chicago.

MISCELLANEOUS**FOR SALE OR RENT**

400 feet of choice dock property on Laflin Street. Hardwood lumber yard preferred.

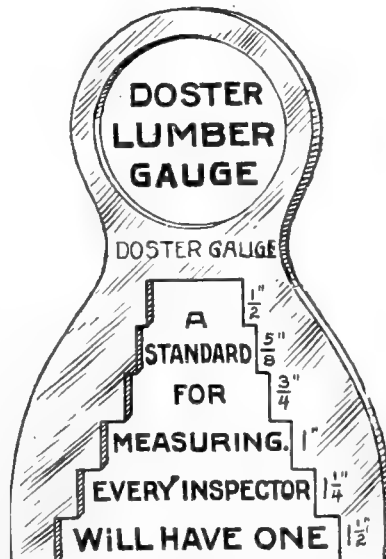
Address FREDERIC T. BOLES, 2424 South Laflin Street, Chicago, Ill.

WANTED—HARDWOOD LUMBERMEN—

to try the Gibson Tally Book. The three-throw aluminum tally ticket cover accommodates any form of ticket desired. The use of the special triplicate tally ticket supplied, printed on water-proof paper with carbon backs makes tallies unalterable. For durability, convenience, accuracy and for systematizing the inspection of lumber the Gibson tally method can't be beat.

Special forms of tally tickets mailed on application. Covers sold on approval to responsible concerns.

HARDWOOD RECORD,
537 So. Dearborn St., Chicago.



For sale by HARDWOOD RECORD,
537 S. Dearborn St., Chicago, Ill.
50 CENTS EACH.

CHICAGO

McParland Hardwood
Lumber Co. 2204 S. Laflin St.
HARDWOODS

FRED D. SMITH

HARDWOOD LUMBER

1337-1343 North Branch St. CHICAGO

E. H. KLANN

Northern and
Southern Hardwoods, and
Yellow Pine

819 FISHER BLDG.

HAR. 1187

Osgood & Richardson
935 Peoples Gas Bldg.

**NORTHERN AND SOUTHERN
HARDWOODS**

Chicago Agents: LAMB-FISH LUMBER CO.

Telephone Canal 1688

CHAS. DARLING & CO.
HARDWOOD LUMBER
22nd Street and Center Avenue
CHICAGO



99% PURE
SILICA
OR SILEX FOR WOOD FILLERS
TAMMS SILICA CO., 19 So. 5th Ave., Chicago

COUNTERFEIT CHECKS

are frequent
except where
our

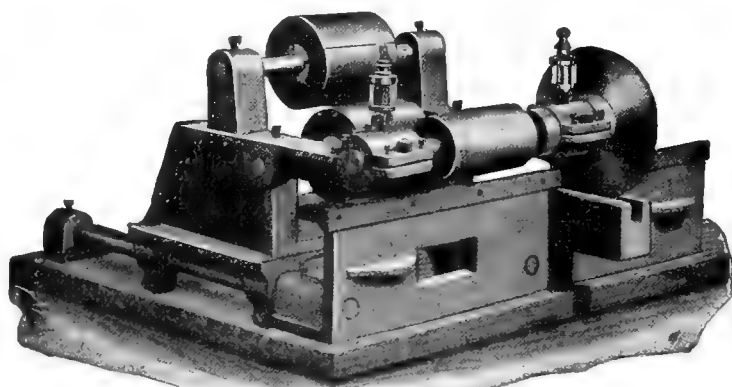
Two Piece
Geometrical
Barter Coin
is in use, then
imitation isn't
possible.
Sample if you
ask for it.

S. D. CHILDS
& CO.
Chicago

We also make
Time Checks,
Stencils and
Log Hammers.



Gerlach Modern Machines
Produce the Cheapest and Best
COOPERAGE STOCK
and **BOX SHOOKS**
Circular, Band and Cylinder Saws
SAW AND LOG TOOLS
THE PETER GERLACH CO., Cleveland, 6th City, U.S.A.



BUTTING SAW

for
Flooring Factories

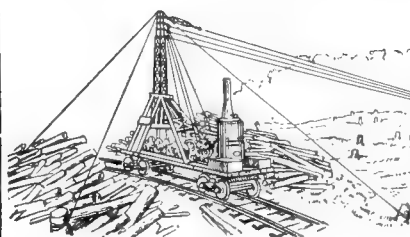
For cutting out defects and making square and smooth ends for end-matching machines. Used by the largest producers. Write for particulars and prices.

Manufactured by
Cadillac Machine Co.
CADILLAC, MICH.

The CHEAPEST HARDWOOD LOGGING

IS DONE WITH

LIDGERWOOD CABLEWAY SKIDDERS



LIDGERWOOD MFG. CO.
96 Liberty Street, New York

Branch Offices
CHICAGO, SEATTLE
Agencies
NEW ORLEANS-WOODWARD, WIGHT & CO. LTD.
CANADA-ALLIS CHALMERS BULLOCK LTD.
MONTREAL VANCOUVER

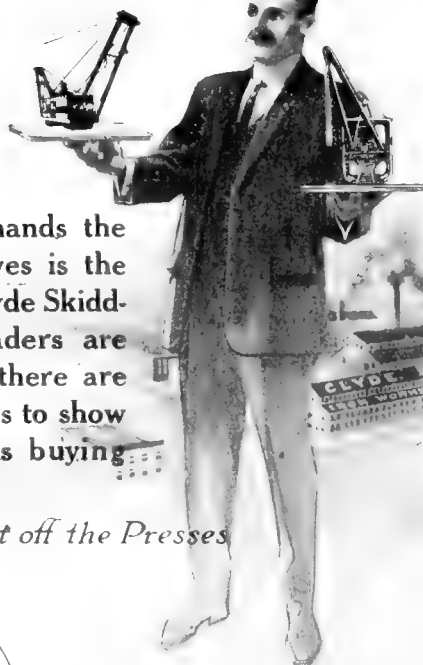
We Welcome The "Man From Missouri"



The man who demands the evidence of his own eyes is the man we like to meet. Clyde Skidders and McGiffert Loaders are making good wherever there are forests, so it is easy for us to show him exactly what he is buying before he buys!

Call For Catalog

Just off the Presses

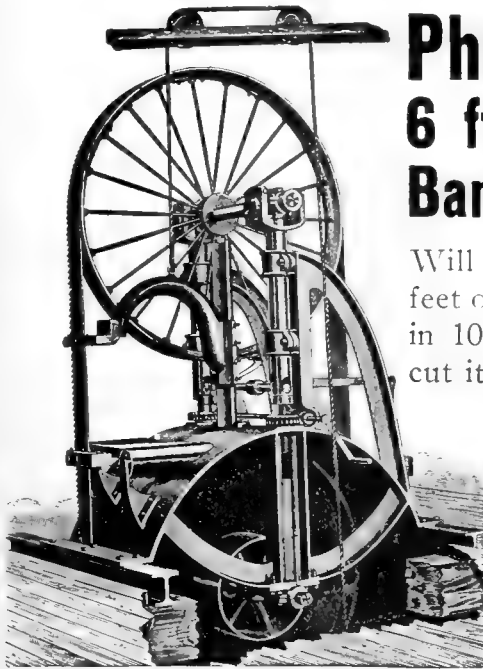


CLYDE IRON WORKS

NEW ORLEANS
SAVANNAH

Largest Manufacturers of
Provenly-Efficient Logging Machinery In The World
Home Office & Factory. DULUTH, MINN.

CHICAGO
PORTLAND



Phoenix 6 ft. Pony Band Mill

Will cut 30,000 feet of 1" lumber in 10 hours and cut it good.

Nearly 200 of these mills sawing wood in the U. S. A.

PRETTY GOOD RECOMMENDATION, ISN'T IT?

MODERATE PRICE

PHOENIX MFG. CO.
EAU CLAIRE WISCONSIN

MERSHON

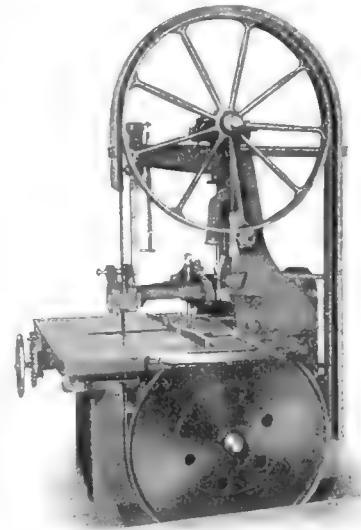
A Specially-Not a Side Line
~~SAND REPAIR~~

Detroit,
Michigan,
Nov. 22nd,
1912.

Wm. B. Mer-
shon & Co.,
Saginaw,
Mich.

Your Band
Ripsaw, in-
stalled in
our plant,
gives us the
best of serv-
ice.

Yours truly,
SCHMIED-
SISSMAN
CO.



Power Feed Band Ripsaw No. 1

Wm. B. Mershon & Co.
SAGINAW MICH.

Corrugated Joint Fasteners

Can be quickly and
cheaply driven with

"ADVANCE" CORRUGATED JOINT FASTENER MACHINE

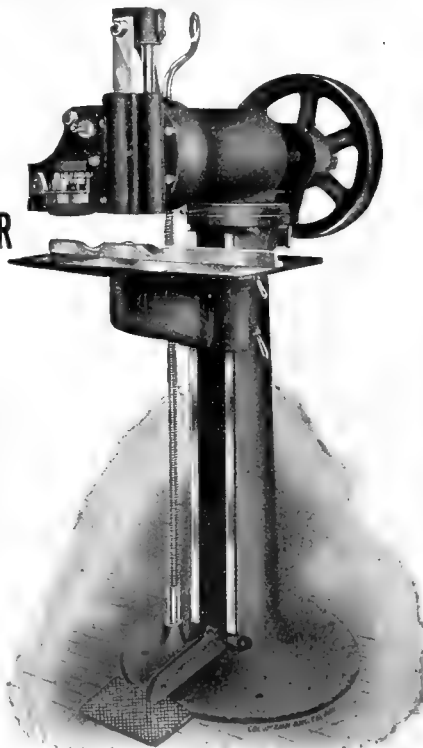
Made in Different
Types to Meet
All Conditions

Specially suitable for
manufacturers of
sash, doors, blinds,
screens, coffins,
furniture, plumbers'
wood-work, porch
columns, boxes,
refrigerators, etc.

Write for bulletins
and prices.

Manufactured only
by

Saranac Machine Co., St. Joseph, Michigan



**ELEPHANT
RUBBER**

BELTING

AIR DRILL AND AIR TOOL

HOSE

**STEAM
WATER
SUCTION**

EXTRA QUALITY

Recommended for hard service
and guaranteed to do the work

SELLING AGENTS

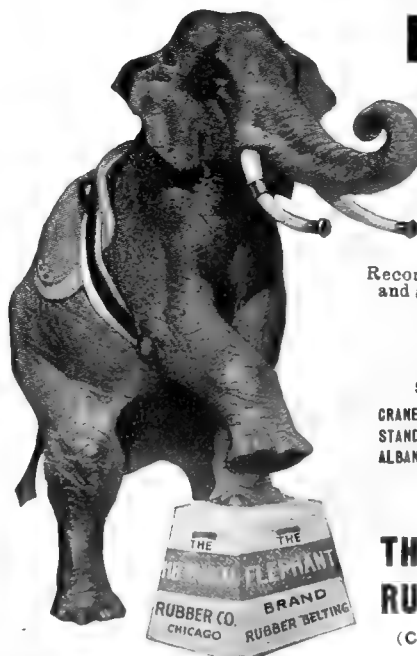
CRANE COMPANY - ALL BRANCHES
STANDARD EQUIPMENT CO., MOBILE, ALA
ALBANY MILL SUPPLY CO., ALBANY, GA.

**THE MECHANICAL
RUBBER COMPANY**

(Chicago Rubber Works)

**307 W. Randolph Street,
ESTABLISHED 1882**

CHICAGO





WISCONSIN



WHERE THE FINEST NORTHERN HARDWOODS GROW

Wood-Using Factories

CAN OPERATE to the best advantage in **WAUSAU**, the point of greatest lumber production in Wisconsin.

A TRIBUTARY SUPPLY of Hemlock, Tamarack, Pine, Cedar, Ash, Basswood, White and Yellow Birch, Hard and Soft Maple, Rock and Soft Elm, furnishes timber suitable for almost every product in which wood is the raw material.

WAUSAU has cheap power, good freight service, dependable labor, the best of modern living conditions in a healthful climate, and excellent factory sites obtainable on the most reasonable terms. This is why Wausau is "The Place for Wood-Using Factories."

WRITE FOR our books, "Wausau, a Good Place to Come," and "Factory Facilities in Wausau."

*The Wausau Advancement
Association
Wausau, Wisconsin*

WE MANUFACTURE MICHIGAN
HARDWOODS AND HEMLOCK.
MILLS ELECTRICALLY
DRIVEN; STOCK
BAND SAWN

Have in Shipping Condition

BIRCH: NO. 2 AND BETTER, 4/4 to 12/4
ASH: NO. 2 AND BETTER, 4/4 to 12/4
ELM: NO. 2 AND BETTER, 4/4 to 12/4
BASSWOOD: NO. 2 AND BETTER, 4/4
to 12/4

WE are well equipped for manufacturing
special sizes, wagon stock, skids, ties, etc.

THE C. A. GOODYEAR LUMBER COMPANY

Office and Mill
TOMAH, WISCONSIN

Logging Camp
BLUE BILL, MICHIGAN

GET OUR PRICES ON

1 car 1" No. 1 Common & Btr. Red Birch.
10 cars 1" No. 2 Common & Btr. Plain Birch.
5 cars 1" No. 1 and No. 2 Common Plain Birch.
2 cars 1 1/4" No. 2 Common & Btr. Plain Birch.
2 cars 1 1/2" No. 2 Common Plain Birch.

Can ship in straight or
mixed cars with other lumber

ROBBINS LUMBER COMPANY

Rhineland, Wisconsin

SAWYER GOODMAN CO.

MARINETTE, WIS.

Mixed Cars of Hardwood, Bass-
wood, White Pine and Hemlock,
Cedar Shingles and Posts

We make a specialty of White Pine Beveled Siding and
White Pine Finish and Shop and Pattern Lumber

— SECURE BETTER PRICES —

AT LESS SELLING COST BY REACHING MORE CUSTOMERS. HARDWOOD
RECORD PUTS YOU BEFORE THEM ALL TWICE A MONTH. ASK US ABOUT IT.

VENEERS AND PANELS

Hoffman Brothers Company **Sliced and Sawed, Quartered** **and Plain Red and** **White Oak**

Walnut Cherry Ash Maple

Let us Send You Our Stock List **FORT WAYNE, IND.**

B. C. JARRELL & CO.

MANUFACTURERS OF

Rotary-Cut Gum and Poplar

VENEERS

Well manufactured, thoroughly
KILN DRIED and FLAT

HUMBOLDT, - TENNESSEE

KANSAS CITY, MO.

HELENA, ARK.

VENEERS

PENROD WALNUT & VENEER COMPANY

General Offices, KANSAS CITY, MO.

CIRCISSIAN

MAHOGANY

Logs VENEERS Lumber

WE IMPORT

WE MANUFACTURE

All Thicknesses of Mahogany
Ready for Shipment

RICE VENEER & LUMBER CO.
GRAND RAPIDS, MICH.

Q For items of Hardwood Stock or Hardwood Machinery, you will find it advantageous to write our advertisers. Get in touch!

Q **HARDWOOD RECORD** is a different kind, and altogether better lumber newspaper than has hitherto been published. This is made possible by the loyal co-operation and support of the hardwood element of the lumber industry. If you are a subscriber you will agree.

KENTUCKY VENEER WORKS

ROTARY CUT SAWED AND SLICED
 GUM, POPLAR, OAK QUARTERED OAK, MAHOGANY
 LOUISVILLE, KENTUCKY

The Central Veneer Co.

SOFT YELLOW POPLAR
CROSS BANDING

Huntington, West Virginia

ESTABLISHED 1899

Adams & Raymond **Veneer Co.**

INDIANAPOLIS, INDIANA

MANUFACTURERS

OF

PLAIN & FIGURED
VENEERS

CIRCISSIAN } WALNUT
AMERICAN }

QUARTERED OAK

ANY THICKNESS

ANY WIDTH

VENEERS AND PANELS

Ahnapee Veneer & Seating Co.

HOME OFFICE, FACTORY AND VENEER MILL, ALGOMA, WIS.
VENEER AND SAWMILL, BIRCHWOOD, WIS.

We manufacture at our Birchwood plant single ply veneers of all native northern woods and deliver stock that is in shape to glue.

From our Algoma factory, where we have specialized for twenty years, we produce panels of all sizes, flat or bent to shape, in all woods, notably in Mahogany and Quarter-Sawn Oak.

We make no two-ply stock, and do not employ sliced cut quartered oak. Our quartered oak panels are all from sawed veneer.

Every pound of glue we use is guaranteed hide stock. We do not use retainers. Our gluing forms are put under powerful screws and left until the glue has thoroughly set.

If you seek a guaranteed product that is the best, based on results accomplished by most painstaking attention and study of every detail, combined with the use of the best stock and an up-to-date equipment, our product will appeal to you.

If you are a "price buyer" we probably cannot interest you.

KIEL WOODEN WARE CO.

WHEN IN THE MARKET FOR ROTARY CUT

BIRCH
BASSWOOD
OAK
ASH
ELM

VENEER

Write Us

WISCONSIN

KIEL
FACTORY AND MAIN
OFFICE

MELLEN
VENEER AND HEADING
MILL

MUST MOVE BY JAN. 1

EXTRA!

EXTRA!

Panels—3 ply—good 1 side

3/16 Ash, 24x60 1/4 Ash, 24x60 1/4 Basswood, 24x60
30x60 30x72

IN STOCK AT CHICAGO WAREHOUSE, 1140 WEST LAKE STREET
TELEPHONE HAYMARKET 3027

Wisconsin Seating Co.

New London, Wis.

HOWARD HANSON, President

THOMAS A. TURNER, Secy. and Treas.

THE HANSON-TURNER COMPANY

MANUFACTURERS OF

ROTARY CUT VENEER AND THIN LUMBER

ELM
BEECH
CURLY BIRCH

OAK
MAPLE

BIRCH
BASSWOOD
BIRD'S-EYE MAPLE

SPECIALTIES:

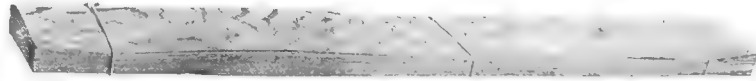
DRAWER BOTTOMS BACK PANELS CENTER STOCK
BACKING PIANO PIN BLOCKS BIRCH DOOR STOCK
CURLY BIRCH BIRD'S-EYE MAPLE

OFFICE and FACTORY at WELLS, N. Y.

VENEERS AND PANELS

OUR SPECIALTY

Highly Figured Quarter-Sawed White Oak Veneer



PUTNAM VENEER & LUMBER CO.
ROACHDALE, IND.

H. I. CUTSINGER, Gen'l Mgr.

Custom Mill Work, Storage, Inspection ON **Foreign Fancy Woods, Mahogany, Cedar, Circassian**

We receive the logs, store or warehouse them, manufacture them into lumber, cut or saw veneers, pile and store the product, and ship via any railroad. Also furnish inspection returns on logs or lumber. Can furnish accommodations and economies which it is impossible to secure elsewhere. We always have on our yards parcels of plain and figured African, Mexican and Cuban Mahogany, Circassian Walnut and Cedar logs, placed here for sale by direct foreign shippers, from which advantageous purchases can be made.

Astoria Veneer Mills & Dock Co.

Long Island City, New York

Veneers and Panels with a Reputation

WE manufacture Veneers in all the native woods and for all purposes. Also Built-up Panels in native and foreign woods—three and five-ply—and have established a reputation for furnishing high-grade material. Send us your inquiries and orders and become one of our satisfied customers.

Underwood Veneer Co.

Wausau, Wis.

“SOVEMANCO.”

We can furnish anything you want in

Sawed and Sliced Foreign and Domestic Figured Veneers

Capacity 15 million feet per year. Ready to take care of carload orders promptly. Small orders shipped same day received, if desired.

SOUTHERN VENEER MFG. CO., Inc.

Office, 21st and Standard.

LOUISVILLE, KY.

Mills, Magnolia, Standard and 21st Sts.

THE SOUTH

PROMINENT SOUTHERN MANUFACTURERS

ANY REASONABLE OFFER

WILL BUY THE FOLLOWING STOCK:
DRY—IN FINE CONDITION

6000 feet 3 4" 1s-2s Qrtd. White Oak, 6" & up.
2700 feet 5 8" No. 2 Com. Qrtd. White Oak.
5000 feet 5 4" No. 2 Com. Qrtd. White Oak.
5700 feet 2 1/4" Com. & Bet. Plain White Oak.
17000 feet 4 4" 1s-2s Qrtd. Poplar.
7500 feet 4 4" 1s-2s Yellow Poplar 7" & up wide.

3 cars 4 4", 6, 4", 2", 2 1/2", 3" and 4" Poplar 1s-2s, 20" & up.
13000 feet 5 4" Common and Better Poplar, 13" & up.
1 car 2 1/2", 3" and 4" Common and Better Hickory.
2 cars 4 4" No. 1 Common Walnut.

We, of course, have a complete stock of Quartered and Plain Oak, Poplar and Hickory, etc., in all grades and thicknesses; and will be glad to have your inquiries for anything you may need.

J. V. STIMSON & CO.

OWENSBORO, KY.

Boice Lumber Co., Inc.

Southern Hardwoods

MAIN OFFICE
RICHMOND, VIRGINIA

Yards: NORFOLK, ABINGDON, GRAHAM, VA.,
and NORTH WILKESBORO, N. C.

Louisiana Long Leaf Lumber Co.

Fisher, Louisiana

Diamond



Brand

OAK FLOORING
A GUARANTEE OF PERFECTION

**IF YOU WANT THE BEST SYSTEM OF ACCURATELY TALLYING AND
RECORDING LUMBER SHIPMENTS OR RECEIPTS**

YOU WILL BE INTERESTED IN

The Gibson Tally Book

This system of tallying lumber is employed by more than two thousand lumber producers, jobbers and wholesale consumers, and is available for tallying lumber, logs, flooring, dimension stock and all other commodities.

Makes three original tallies without the use of loose carbon sheets.

New Catalogue showing twenty-six various forms of tickets sent free on request.

Tally Book Dept., Hardwood Record, Chicago

THE SOUTH

PROMINENT SOUTHERN MANUFACTURERS

Baker-Matthews Manufacturing Co.

Sikeston, Mo.

Band Sawn Southern Hardwoods

SPECIALTIES

RED GUM, PLAIN OAK

SEND US YOUR INQUIRIES

GARETSON-GREASON LUMBER CO.

1002-1005 Times Bldg.

ST. LOUIS

MANUFACTURERS

Three Mills

Frank Purcell

Kansas City
U. S. A.

Exporter of Black Walnut Logs



FIGURED WALNUT IN LONG WOOD
AND STUMPS

WE ARE TOO BUSY MAKING

Good Gum Goods

TO HATCH OUT ANY FOXY
GRADE-MIXING SCHEMES!

**Himmelberger-Harrison
Lumber Company**

Cape Girardeau,

Missouri

William S. Whiting

MANUFACTURER AND WHOLESALE

WHITE PINE

BASSWOOD

BIRCH

BUCKEYE

CHESTNUT

MAPLE

POPLAR

ASHEVILLE, N. C.

OAK

Salt Lick Lumber Co.

SALT LICK

KENTUCKY

MANUFACTURERS OF

Eureka
OAK AND BIRCH
Oak Flooring

Complete stock of $\frac{3}{8}$ " and $\frac{13}{16}$ " in all
standard widths

CHERRY

1 Car 4/4
Log Run
Mill Cull
Out,

OAK

84,000 ft. 4/4
Log Run
Quartered.

WE HAVE IT

W. W. DEMPSEY

Manufacturer and
Wholesaler of

HARDWOODS

BAND SAWED STOCK

A LINE BRINGS PRICE BY RETURN MAIL

General Offices
Johnstown, Pa.

New York Office
No. 18 Broadway

CYPRESS

250,000 feet
of 4/4 No. 1
Common &
Better, Old
grading.

SPRUCE

4/4 and 8/4
Clear and
Select. 8/4
Box.

WE MANUFACTURE AND
DEAL IN

TIES, HARDWOOD LUMBER AND TIMBER

We want to buy a large
amount of 4/4, 8'—8'6"
Oak from Tie Sides

Hill Bros. Tie & Lumber Company
Charleston, W. Va.

M I C H I G A N

FAMOUS FOR HARD MAPLE AND GREY ELM

"Ideal" Steel Burnished Rock Maple Flooring

is the flooring that is manufactured expressly to supply the demand for the best. It is made by modern machinery from carefully-selected stock and every precaution is taken throughout our entire system to make it fulfill in every particular its name—"IDEAL."

ROUGH OR FINISHED LUMBER—ALL KINDS

Send Us Your Inquiries

The I. Stephenson Company - WELLS, MICHIGAN

We Offer:

About 500M No. 3 Maple.
About 800M No. 2 Common and Better Basswood.

To be cut during 1913

On hand dry, 30 M 4/4 No. 1 Com. and Better Hard Maple.

**LATH
SHINGLES**

**MICHIGAN
HARDWOODS**

**PINE AND
HEMLOCK**

East Jordan Lumber Co.

East Jordan, Michigan

MAKERS OF IMPERIAL MAPLE FLOORING

FORMAN'S FAMOUS OAK FLOORING

Is made in faultless fashion from the most uniform-colored and even-textured oak produced; worked from Kraetzer-Cured lumber manufactured at our

Heidelberg, Ky., sawmills.

Thomas Forman Company

Detroit : : : : : Michigan

Von Platen Lumber Co.

Iron Mountain, Michigan

MANUFACTURERS OF

BIRCH BASSWOOD ELM MAPLE

100 M Ft. 6/4 No. 1 and 2 Common Maple.

50 M Ft. 5/4 No. 1 and 2 Common Maple.

75 M Ft. 4/4 No. 1 Common Birch.

40 M Ft. 5/4 No. 1 and 2 Common Birch.

We Solicit Your Inquiries

SHIPMENTS VIA C. & N. W.—C., M. & ST. P.—W. & M.

"Chief Brand" Maple and Beech Flooring

in 3, 4 and 13-16 and 1 1-16 inch Maple in all standard widths and grades, will commend itself to you and your trade on its merits alone

WRITE US, WE CAN INTEREST YOU

Kerry & Hanson Flooring Co.

GRAYLING, MICHIGAN

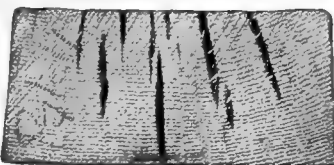
S. L. EASTMAN FLOORING CO.
SAGINAW BRAND
MAPLE FLOORING
SAGINAW, MICH.

MORE THAN 2,000 LUMBERMEN

are using the new Gibson Tally Book with its duplicate or triplicate tally tickets. If you haven't seen it, let us send you one with specimen tickets on approval. They solve your shortage and inspection troubles.

HARDWOOD RECORD

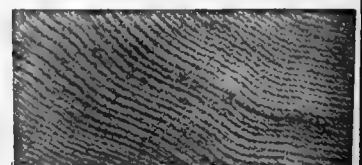
CHICAGO



Lumber Dried As Never Before
SEE THE DIFFERENCE

GRAND RAPIDS DRY KILN

GRAND RAPIDS VENEER WKS., SOLE MFRS., MICHIGAN



BUFFALO

The Foremost Hardwood Market of the East

G. ELIAS & BRO. HARDWOODS

White Pine, Yellow Pine, Spruce,
Hemlock, Fir, Lumber, Timber, Mill-
work, Boxes, Maple and Oak Flooring

955-1015 ELK STREET

Hugh McLean Lumber Co.

OUR SPECIALTY:

QUARTERED WHITE OAK

940 ELK STREET

I. N. Stewart & Bro.

Specialties

Cherry and Oak

892 Elk Street

Standard Hardwood Lumber Co.

OAK, ASH and CHESTNUT

1075 Clinton Street

BUFFALO HARDWOOD LUMBER CO.

We want to buy for cash

OAK, ASH AND OTHER HARDWOODS

All grades and thicknesses.
Will receive and inspect stock at shipping point.
Branch yard, Memphis, Tenn.

940 Seneca Street, BUFFALO

T. SULLIVAN & CO.

SPECIALTIES:

Gray Elm, Brown Ash

Pacific Coast Fir and Spruce

2 ARTHUR STREET

ORSON E. YEAGER

SPECIALTIES:

Oak, Ash and Poplar

932 ELK STREET

ANTHONY MILLER

HARDWOODS OF ALL KINDS

893 EAGLE STREET

The above firms carry large and well assorted stocks of all kinds and grades of Hardwoods, and have every facility for filling and shipping orders promptly. They will be pleased to have your inquiries.

Vansant,

Manufacturers Old-Fashioned

Soft

Yellow

Poplar

5-8 and 4-4
in Wide Stock,
Specialty

Kitchen &

Company

Ashland, Kentucky

EASTERN REPRESENTATIVE, John L. Cochran
601 W. 115th Street, New York City

YOU pay a *little* more for our hardwood lumber than you do for many others', but it's worth *much* more.

With our modern and first-class equipment and expert operatives, we couldn't make bad lumber if we tried to, because the *quality* and *size* of our virgin tough mountain white ash, red birch, yellow poplar, buckeye, maple, red oak, cherry and basswood, averaging less than three logs to the thousand, and 95 per cent sixteen feet, is the best type of hardwood timber growth in the United States, and shows a larger percentage of *firsts*.

If you are a discriminating buyer, let's get acquainted.

LITTLE RIVER LUMBER COMPANY

Townsend, Tenn.

W. H. White Company Boyne City Lumber Company

Mills and General Office: BOYNE CITY, MICH.

Sales Office: BUFFALO, N. Y.

WE OFFER

4/4 and 5/4 No. 2 common and better
Basswood

4/4 No. 2 common and better Brown
Ash

4/4 and 5/4 No. 2 common and better
Birch, strictly unselected for color

4/4 and 5/4 No. 1 and No. 2 common
Flooring Maple.

4/4, 5/4, 6/4, 8/4, 10/4, 12/4 and 16/4
Firsts and Seconds Maple

STOCK DRY—STANDARD GRADES—BEST
MANUFACTURE—CAR OR CARGO SHIPMENTS

YELLOW POPLAR

MANUFACTURERS OF HAND SAWED

POPLAR
QUARTERED OAK
PLAIN OAK
CHESTNUT
BASSWOOD



SPECIALTY
QUARTER SAWED
WHITE OAK

Coal Grove, Ohio, U. S. A.

LUMBER CO.

Aardwood Record

Eighteenth Year, }
Semi-Monthly. }

CHICAGO, MARCH 10, 1913

{ Subscription \$2.
{ Single Copies, 10 Cents.



The "What & Why" of McIlvain Service

With yards in the heart of the best lumber districts, we are able to fill practically any lumber order. Having fifty or more shipping points, we are able to facilitate prompt delivery. The size of our organization enables us to quote rock-bottom market prices. Our business has been built on giving our customers such service as would be a continual source of satisfaction—we would continue building.

An important feature of McIlvain Service is the monthly stock list—A postal will bring "Lumber News" regularly

J. GIBSON McILVAIN & Co.
1420 Chestnut Street Philadelphia, Pa.

HOLLOWAY HARDWOODS

*The following Yellow Cottonwood
is band-sawn and runs*

60% 14' and 16'

COTTONWOOD

176,850 feet 4/4 1st & 2nd 6" to 12".

89,432 feet 4/4 1st & 2nd 13" & wider.

163,421 feet 4/4 No. 1 Common, containing all the wide.

Holloway Hardwood Lumber Co.
20 W. Jackson Blvd. Chicago



**Cartier-Holland
Lumber Company**



MR. MANUFACTURER:

We would like to contract our output of Log Run BIRCH and SOFT ELM for 1913, to be cut to order as near as possible, in accordance with your wishes.

Our estimated cut of each wood would be about as follows:

100,000' LOG RUN BIRCH
100,000' LOG RUN SOFT ELM

The above will be produced from choice logs



**Ludington
Michigan**



MICHIGAN

FAMOUS FOR HARD MAPLE AND GREY ELM

DIMENSION

MANUFACTURED BY

COBBS & MITCHELL, Inc.

CADILLAC, MICH.

We are manufacturing 1x1—22" to 40" Maple, Beech and Birch in our hardwood flooring factory.

This Stock is Kiln-dried

The Pieces are Straight

The Quality is Clear

Do You Want Such Stock?

Mitchell Brothers Co.

Sales Department

Cadillac, Mich.

February 14, 1913

Dry Michigan Hardwoods

1x4 Basswood No. 1 Common.....	11 M
6. 4 Cadillac Gray Elm 1s & 2s.....	7 M
1x6 Maple 1s & 2s.....	22 M
1x9 Maple 1s & 2s.....	17 M
4/4 White Maple, End Dried.....	16 M
5/4 White Maple, End Dried.....	4 M
4/4 Birdseye Maple, End Dried.....	3 M
4/4 Soft Maple, No. 2 Common & Better.....	9 M

WE MANUFACTURE A SPECIAL GRADE OF HARDWOOD FLOORING FOR FACTORY FLOORS

W. D. YOUNG & CO.

MANUFACTURERS

FINEST MAPLE FLOORING

KILN DRIED, HOLLOW BACKED
MATCHED OR JOINTED
POLISHED AND BUNDLED

Hard Maple, Beech and Birch Lumber

1 TO 6 INCHES THICK

WRITE FOR PRICES

BAY CITY, :: :: MICHIGAN

THE

Kneeland-Bigelow Company

Hardwood Manufacturers

100,000 ft. 5/4 1st & 2nds Basswood
100,000 ft. 5/4 No. 1 Common Basswood
200,000 Feet
5/4 No. 2 Common and Better Beech

All of the above stock is nicely manufactured, being hand sawed, trimmed, and well seasoned. We are prepared to quote attractive prices for this material for immediate shipment.

BAY CITY, MICH.



CHICAGO



THE GREATEST HARDWOOD MARKET IN THE WORLD

FLANNER-STEGER LAND & LUMBER CO. MAPLE AND BIRCH FLOORING

of unexcelled manufacture and quality. Also Manufacturers of Basswood, Birch, Elm, Maple and Hemlock.

SEND US YOUR INQUIRIES

MILLS:
BLACKWELL, WISCONSIN

GENERAL SALES OFFICE
1704 STEGER BLDG., CHICAGO, ILL.

J. RAYNER VENEERED PANELS

ALL WOODS
SEND FOR STOCK LIST

MAHOGANY LUMBER

CARROLL AVE. AND SHELDON ST.
CHICAGO

PRIMA VERA

(WHITE MAHOGANY)

We have just received a large shipment of Prima Vera logs, and solicit your enquiry for price on any thickness of lumber or veneer, plain or figured.

HUDDLESTON-MARSH LUMBER COMPANY

2254 LUMBER STREET, CHICAGO

We Have Made a Success
of the Veneer Business—

Why?

Because no permanent money-making proposition can be one-sided and we are benefiting our customers

Let us have your inquiries when in the market for the following woods:

MAHOGANY	YELLOW POPLAR
CIRCASSIAN	PINE
CURLY BIRCH	R.C. Red & Wh. Oak
WALNUT BUTTS	R. C. Birch
And QUARTERED OAK, Sawn and Sliced	

Veneer Manufacturers Company
Fulton and May Streets, Chicago, Ill.

Estabrook-Skeeel Lumber Co.

MANUFACTURERS AND DEALERS IN

Maple, Birch, Elm, Basswood, Ash
And Other Northern Hardwoods

In the Market for Round Lots of Hardwood

WRITE US BEFORE SELLING

Fisher Building, - - - CHICAGO

'PHONE HARRISON 1984

A floor to adore



For thirty-three years Wilce's Hardwood Flooring has been among the foremost on the market and because it stands today "unequaled" is the best evidence that its manufacturer has kept abreast of modern methods and the advanced demands of the trade. To convince yourself of the above statements, try our polished surface flooring, tongued and grooved, hollow backed, with matched ends and holes for blind nailing—you'll find it reduces the expense of laying and polishing.

Our Booklet tells all about Hardwood Flooring and how to care for it—also prices—and is free.

The T. Wilce Company

22nd and Throop Sts. CHICAGO, ILL.

Welcome to Our City

When you are buying your ticket for a trip into the hardwood country, don't forget to tell the man to make Louisville, Ky., your destination. It's unnecessary to arrange merely for stop-over privileges, for the reason that when you get here we'll make things so interesting for you that it will be unnecessary to proceed further.

You know all about the traditional Kentucky welcome, of course, and it's taken for granted that you realize that this is still on tap, ready for wanderers like yourself who don't have a chance to enjoy life in God's country very often. But we've got more than a mere welcome; what is more to the point, we've got the goods.

In these piping times of good business, with everybody in the market for something or other, and a lot of items as hard to find as the storied needle in the hay-stack, the advantages of trading in a market like Louisville are even more apparent than at other times.

That is to say, you can get quartered oak, and plain oak, and poplar, and ash, and hickory, and mahogany, and veneers, and panels, and about everything there is to be had in the hardwood line, right here; it's a good deal like going into a department store and buying a refrigerator in the basement, a diamond ring on the first floor, a suit of clothes on the second and a dinner on the roof. Anything you may happen to want is here. If you don't see it, ask for it.

We'll be looking for you.

The Louisville Hardwood Club

EDWARD L. DAVIS LUMBER CO.
LOUISVILLE POINT LUMBER CO.
W. P. BROWN & SONS LUMBER CO.
NORMAN LUMBER CO.

OHIO RIVER SAWMILL CO.
BOOKER-CECIL CO.
THE LOUISVILLE VENEER MILLS
C. C. MENGEL & BRO. CO.

KNOXVILLE

Famous for Finest Type of Poplar, Oak and Chestnut

VESTAL LUMBER AND MANUFACTURING CO. KNOXVILLE, TENNESSEE.

QUARTERED WHITE OAK OUR SPECIALTY

MANUFACTURERS OF
QUARTERED WHITE OAK, PLAIN OAK, POPLAR, WALNUT & TENNESSEE RED CEDAR LUMBER
BAND MILLS AT VESTAL, A SUBURB OF KNOXVILLE. SOUTHERN AND LOUISVILLE & NASHVILLE RAILROAD

H. S. MIZNER,
Pres.

C. C. CANNON,
Vice-Pres.

J. M. LOGAN,
Gen'l Manager

C. R. SWANN,
Sec'y and Treas.

J. M. LOGAN LUMBER CO.

MANUFACTURERS AND WHOLESALERS
HARDWOODS AND PINE
POPLAR A SPECIALTY

Main Office and Yards: Knoxville

Branch Office and Yard:

Bank and McLean Ave., Cincinnati I. M. ASHER, Mgr.

We Want Orders for the following Dry Stock:
WHITE OAK—Plain or Quartered.

RED OAK—Plain or Quartered.

CHESTNUT BASSWOOD
POPLAR WHITE PINE

Always carry large well
assorted stock of all
kinds of Hardwoods.

CAN SHIP ON SHORT NOTICE.

Maphet & Shea Lumber Co. Manufacturers and Wholesalers

OFFICE: 703-705 HENSON BUILDING

Yard: Middlebrook Pike and
Lonsdale Car Line

KNOXVILLE, TENN.

WE WANT TO MOVE

3 cars 4/4 No. 1 Common Poplar, 7" & up
2 cars 4/4 Clear Sap Poplar, 7" & up
1 car 4/4 Select Poplar, 7" & up
1 car 4/4 1 & 2 Red Oak, 10" & up
1 car 4/4 1 & 2 Chestnut
1 car 4/4 No. 1 Common Chestnut

We manufacture: YELLOW POPLAR,
OAK, CHESTNUT, WHITE AND YEL-
LOW PINE, HEMLOCK BARK, ETC.

BAND AND CIRCULAR MILLS—EAST TENN.
MOUNTAIN VIRGIN HARDWOOD STUMPAGE

"THE VERY BEST" Red Birch

Knoxville Veneer Co.

P. B. RAYMOND, General Manager, Knoxville, Tenn.

Kimball & Kopcke Knoxville, Tennessee

Manufacturers and Shippers of

Appalachian Hardwoods
OAK OUR SPECIALTY



CHARLESTON, W. VA.

2 cars 6/4" Common & Better
Chestnut.

2 cars 4/4" 1sts & 2nds Cypress.

5 cars 4/4" 1sts & 2nds Red Gum.

5 cars 4/4" No. 1 Common Red Gum.

5 cars 4/4" 1sts & 2nds Sap Gum.



NASHVILLE



CELEBRATED FOR HIGHEST TYPE TIMBER GROWTH, FAULTLESS MANUFACTURE AND GOOD GRADES

Cherokee Lumber Co.

For the next thirty days we want to move Quartered White Oak and Chestnut and would appreciate your inquiries for attractive prices.

NASHVILLE, TENN.

SECURE BETTER PRICES

AT LESS SELLING COST BY REACHING MORE CUSTOMERS. HARDWOOD RECORD PUTS YOU BEFORE THEM ALL TWICE A MONTH.

ASK US ABOUT IT

We will name very attractive prices on a few cars of each of the following items:

4/4, 6/4, 10/4 and 12/4 1s and 2s Poplar.
4/4 and 8/4 Sap Poplar.
1 1/4", 1 1/2" and 2 1/2" No. 1 Common Poplar.
4/4 No. 1 and Panel Poplar in widths of 12 to 17", 18 to 23" and 24" and up.
4/4 x 13 to 17" Poplar Box Boards.
4/4 1s & 2s Basswood or Linn—very fine.
3/8, 4/4, 5/4, 10/4 and 12/4 1s & 2s Qtd. W. Oak.
4/4, 5/4, 6/4 and 8/4 No. 1 Common Qtd. W. Oak.
6/4 1s & 2s Qtd. R. Oak.
4/4, 5/4 and 6/4 No. 1 Common Qtd. R. Oak.
6/4 and 10/4 1s & 2s Hickory.
4/4, 6/4, 10/4 and 12/4 No. 1 Common Hickory.
4/4, 6/4, 8/4, 10/4 and 12/4 No. 2 Common Hickory.
4/4 1s & 2s Chestnut, also 5, 6 and 8/4.
4/4 No. 1 Common Chestnut.

John B. Ransom & Co.

MANUFACTURERS OF

Hardwood Lumber

Nashville, Tenn.

Paepcke Leicht Lumber Company

CHICAGO

Southern Hardwoods

☐ We offer stock, produced by our band mills, from our own timber.

☐ We control absolutely the manufacture, piling, grading and shipping of our product and are thus able to assure our trade of uniformity of grades and manufacture.

SPECIALTIES:

RED GUM
SAP GUM

RED OAK
WHITE OAK

COTTONWOOD
YELLOW CYPRESS

SOFT ELM
WHITE ASH

Paepcke Leicht Lumber Company

CHICAGO

LAMB-FISH LUMBER CO.

Band Mill and General Offices

CHARLESTON, MISS.

**THE LARGEST HARDWOOD MILL IN THE WORLD
ANNUAL CAPACITY, 40,000,000**

STOCK LIST—Dry Lumber on Hand March 1, 1913



TELEGRAPH
CODES
UNIVERSAL
HARDWOOD
WESTERN UNION
Cable Address, Lamb

	3/8	1/2	5/8	3/4	4/4	5/4	6/4	8/4	10/4	12/4	16/4
FAS. Qtrd. White Oak.....	50,000				20,000	25,000	7,000				
FAS. Qtrd. White Oak, 10" up.....					20,000						
No. 1 Com. Q. W. Oak.....				20,000	150,000						
No. 2 Com. Q. W. Oak.....					15,000						
FAS. Pl. White Oak.....	30,000	30,000	20,000		15,000	30,000					3,000
No. 1 Com. Pl. White Oak.....			40,000	20,000	400,000	5,000	20,000				
FAS. Pl. W. O., 12" up.....				4,000							
FAS. Pl. Red Oak.....			30,000					20,000			1,000
No. 1 Com. Pl. R. Oak.....			20,000	20,000							
C. & B. Qtrd Red Gum.....					50,000	5,000		1,000			
FAS. Circassian Red Gum.....	25,000	25,000	15,000	30,000	30,000	2,000	3,000	1,000			
FAS. Pl. Red Gum.....	400,000	200,000	125,000	300,000	500,000	75,000	80,000	40,000		3,000	
No. 1 Com. Pl. Red Gum.....	60,000	20,000	130,000	40,000	200,000	60,000	20,000				
FAS. Sap Gum, 18" up.....					15,000						
FAS. Sap Gum, 6" up.....	30,000	50,000	40,000	50,000		30,000	20,000	15,000			
No. 1 Com. Sap Gum.....					200,000		15,000				
No. 2 Com. Gum.....	75,000	30,000	20,000	35,000							
S. & B. Cypress.....					50,000	150,000	20,000				
C. & B. Tupelo.....					100,000						
Log Run Elm.....					45,000						

OUR LUMBER CONTAINS ALL WIDE STOCK PRODUCED IN MANUFACTURING AND WILL RUN OVER 50% OF 14 & 16 FT. LENGTHS. WE ALSO MANUFACTURE OAK TIMBERS & BRIDGE PLANK—FACILITIES FOR KILN-DRYING & DRESSING

"STEARNS" QUALITY LUDINGTON

HARDWOOD SPECIALISTS

We Specialize in

MIXED CARLOAD ORDERS

of

Maple, Beech, Birch, Basswood, Elm and Ash
and our specialty is

PROMPT SERVICE

Try us when you want it quick

The **STEARNS**
SALT & LUMBER CO. LUDINGTON, MICH.

BAND SAWN HARDWOODS

WE PRODUCE OUR OWN STOCKS

OAK—Plain and Quartered, Red and White

COTTONWOOD—Ash, Southern Elm, Gum, Soft Maple

A FEW ITEMS WE WANT TO MOVE:

100,000 Ft. 4/4" x 18" to 21" 1st & 2nds Cottonwood.
150,000 Ft. 4/4" x 9" to 12" Cottonwood Box Boards.
50,000 Ft. 5/4" x 13" to 17" 1st & 2nds Cottonwood.
75,000 Ft. 3/8" 1st & 2nds Red Gum.
41,000 Ft. 1/2" 1st & 2nds Red Gum.

44,000 Ft. 5/8" 1st & 2nds Red Gum.
86,000 Ft. 3/4" 1st & 2nds Red Gum.
110,000 Ft. 4/4" 1st & 2nds Red Gum.
120,000 Ft. 5/8" 1st & 2nds Sap Gum.
85,000 Ft. 3/4" 1st & 2nds Sap Gum.

WRITE US FOR PRICES

ANDERSON-TULLY COMPANY
HARDWOOD LUMBER **Memphis, Tenn.**

500 Copies Sold Within a Week After Prospectus Was Issued

Hardwood Record announces the issue on April 15, 1913, of an Authoritative Commercial and Scientific Book

American Forest Trees

By Henry H. Gibson, Editor Hardwood Record
Edited by Hu Maxwell, Wood Utilization Expert

The Work Involves:

First: A botanical description of the more than 300 species of American forest tree growth.

Second: A physical description of the wood of these species.

Third: A recital of the chief uses of all important American woods, together with suggestions of advantageously broadening their uses.

Fourth: Complete information concerning the range of growth of all varieties.

Fifth: Related trees are logically grouped according to families and spe-

cies; important species covered in substantial detail, and brief mention of the woods of minor importance.

Sixth: Scientific name of each tree is recited, as well as the various common names by which it is recognized in different parts of its range of growth.

Seventh: The properties of the various woods are carefully analyzed, particularly weight, hardness, stiffness, strength, elasticity, toughness, color, figure, and seasoning and lasting properties.

☞ The book will contain between 650 and 750 pages, will be printed on the best quality of enameled paper, and handsomely bound in half leather, dark green roan back and corners, with basket cloth sides, silk head-bands, gold stamping on the back, and gilt top.

☞ The work will be illustrated with more than 100 full-page pictures on plate paper in sepia, outlined in orange, from photographs, covering all the chief commercial varieties of virgin forest timber growing in the United States; and also with numerous engravings, from drawings and photographs, showing leaf and flower forms, etc.

☞ The price of the work is \$6.00, delivered by express or mail, and is sold only on subscription.

☞ An order blank, and a prospectus, showing the character of the paper, size of page and style of printing will be forwarded on application.

Address Book Department, HARDWOOD RECORD

537 South Dearborn Street

Chicago, Illinois

ORDERS SHOULD BE PLACED AT ONCE

CINCINNATI

THE GATEWAY OF THE SOUTH

WE WANT TO BUY

1", 1 1/4", 1 1/2" 1s & 2s AND NO. 1 COMMON SAP GUM
1", 1 1/2" & 2" 1s & 2s AND NO. 1 COMMON RED GUM
1" NO. 1 COMMON TUPELO.

SUBMIT US YOUR STOCK SHEETS
WITH BEST CASH PRICES

DUHLMEIER BROS.
CINCINNATI, OHIO

The Maley, Thompson
& Moffett Co.

**Veneers, Mahogany and
Hardwood Lumber**

Largest Stocks Best Selections
CINCINNATI, OHIO

L. W. RADINA & CO.

DEALERS IN

**POPLAR AND
HARDWOODS**

CINCINNATI : : OHIO

89%

of **HARDWOOD RECORD** subscribers are owners of steam plants. Eighty-nine per cent are, therefore, buyers of wood-working machinery. There is little percentage of waste circulation in **HARDWOOD RECORD** for machinery advertisers.

W. E. HEYSER, President WEAVER HASS, V. President
BENJAMIN BRAMLAGE, Sec'y & Treas.

The W. E. Heyser Lumber Company

MAIN OFFICE & YARDS
Winton Place
Cincinnati, Ohio

BRANCH YARDS AND MILLS
West Virginia, Mississippi, Arkansas & Kentucky

12,000,000 ft. High Shipments made
Grade West Vir direct from our
ginia and Southern own yards and
Hardwoods in mills in straight or
stock at all times. mixed cars.

SEND US YOUR INQUIRIES

BENNETT & WITTE

10 cars 4/4 No. 1 Common Plain Red Oak
5 cars 4/4 No. 1 Common Plain White Oak
5 cars 5/8 1sts and 2ds Sap Gum.
10 cars 3/4 1sts and 2ds Sap Gum
20 cars 4/4 1sts and 2ds Red Gum.
10 cars 4/4 No. 1 Common Red Gum.
1 car 3" Plain White Oak, 1sts and 2ds.

Main Office
CINCINNATI, OHIO

SOUTHERN OFFICE, MEMPHIS, TENN.
EXPORT OFFICE, NEW ORLEANS, LA.

THE MOWBRAY & ROBINSON CO.

CINCINNATI, OHIO

We Want to Move Quick

1" No. 1 Com. Poplar 1" Sap & Select Poplar
1 1/4" No. 1 Com. Poplar 1 1/2" Sap & Select Poplar
1 1/2" No. 1 Com. Poplar 2" Sap & Select Poplar
2" No. 1 Common White Ash

WILL MAKE LOW PRICES TO MOVE QUICK

THE EAST

BOSTON

NEW YORK

PHILADELPHIA

WM. WHITMER & SONS

INCORPORATED

Manufacturers and Wholesalers of All Kinds of

"If Anybody Can,
We Can"

HARDWOODS

West Virginia Spruce and Hemlock
Long and Short Leaf Pine Virginia Framing

Franklin Bank Bldg.

PHILADELPHIA

Willson Bros. Lumber Co.

MANUFACTURERS

WEST VIRGINIA HARDWOODS

Oliver Building

PITTSBURG, PA.

Saw Mills Designed and Built

Plans and specifications prepared. Construction supervised.
First class heavy millwright work. Entire plants surveyed. Machinery for complete mills. Fire loss adjustments. Practical sawmill engineer. Can save you money. Highest testimonials.

C. M. STEINMETZ,

P. O. Box 83, Washington, D. C.

H. D. WIGGIN 89 STATE STREET BOSTON, MASS.

MANUFACTURER HARDWOOD LUMBER

Circular-sawed Poplar, Oak, Chestnut, Basswood, Maple
Mill at Stone Coal Junction, West Virginia

CHARLES HOLYOKE

141 MILK STREET, BOSTON, MASS.

HARDWOODS

WHITE OAK } 6x6 to 12x12 BILL TIMBERS } 10 to 20 ft.

ALSO BRIDGE PLANK

J. S. KENT COMPANY PHILADELPHIA

W. R. TAYLOR LUMBER CO.

Wholesalers and Manufacturers
CYPRESS, WHITE PINE, HARDWOODS AND HEMLOCK

1829 Land Title Building, PHILADELPHIA, PA.

PALMER & PARKER CO.

TEAK

ENGLISH OAK

CIRCASSIAN WALNUT

MAHOGANY

VENEERS

EBONY

DOMESTIC

HARDWOODS

103 Medford Street, Charlestown Dist.
BOSTON, MASS.

"WHITE PINERS"

AMERICAN LUMBER & MANUFACTURING COMPANY

"Old-fashioned" Soft Cork White Pine

"Idaho" White Pine

"Silver" White Pine

Also Yellow Pine and Hardwoods

Manufacturers and Jobbers.

PITTSBURGH, PA.

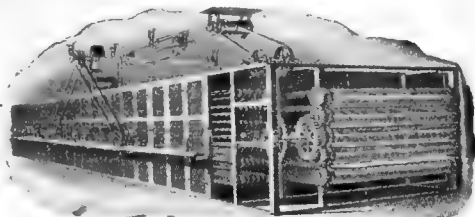
WISTAR, UNDERHILL & NIXON

REAL ESTATE TRUST BUILDING, PHILADELPHIA, PA.

QUARTERED WHITE OAK

NICE FLAKY STUFF

PROCTOR VENEER DRYER FIREPROOF —AN— UNPARALLELED SUCCESS

No
Splitting
Nor
Checking
No
Clogging
Nor
AdjustingRecommended by
all those
who
have tried
itTHE PHILADELPHIA TEXTILE MACHINERY COMPANY
DEPT. L HANCOCK & SOMERSET STS. PHILA, PA.

If You Knew

What our BULLETIN SERVICE was doing
for your competitor in the lumber business, you'd
not only want the service yourself, but YOU'D
HAVE IT.

Let Us Tell You About It.

Hardwood Record :: Chicago.

THE EAST

LEADING MANUFACTURERS AND JOBBERS

LET us talk to you about the plain and quartered oak that made Indiana famous. It's the kind we make to-day.

Wood-Mosaic Co., New Albany, Ind.

HARD MAPLE

When the quality of being hard is required in Maple, Vermont or Adirondack stock should be specified. Maple will not grow harder for us than other people, but it certainly does grow harder in this section of the country than elsewhere.

WE CAN MAKE PROMPT SHIPMENTS.

GEO. WEBSTER LUMBER CO.
21 Besse Place, Springfield, Mass.

We Know How to fill your orders for all kinds of **HARD-**
WOODS, WHITE PINE, YELLOW PINE,
SPRUCE, HEMLOCK, CYPRESS, HARDWOOD FLOORING.
Give us a trial.

THOMAS E. COALE LUMBER COMPANY
FRANKLIN BANK BUILDING, PHILADELPHIA, PA.

JONES HARDWOOD COMPANY
33 Broad Street, Boston, Mass.

Birch, Maple and Beech

For Quick Shipment 2 Cars 4/4 No. 1 Common and Better Chestnut
1 Car 6/4 No. 1 Common and Better Chestnut
1 Car 8/4 No. 1 Common and Better Chestnut
3 Cars 5/4 Sound Wormy Chestnut

Inquiries Promptly Answered

DANIEL B. CURLL, REAL ESTATE TRUST BLDG., PHILADELPHIA, PENNA.

J. & J. VINKE

Agents for the Sale of

AMERICAN HARDWOODS IN LUMBER AND LOGS
AMSTERDAM, HOLLAND

BEECHER & BARR
OAK CHESTNUT POPLAR
WHITE PINE, YELLOW PINE AND HEMLOCK
INTERIOR TRIM. HARDWOOD FLOORING.
442 LAND TITLE BLDG. PHILADELPHIA, PA.

Going up—Hardwood Timber

We have the following hardwood and pine timber for sale at prices that have not as yet been advanced with the rise in value on timber lands. For a short time we offer—

150,000,000 FEET HARDWOOD IN SOUTHEAST ARKANSAS — A SPLENDID OPPORTUNITY.

7,600,000 FEET OF HARDWOOD IN SOUTH-WEST ARKANSAS

We also have timber in British Columbia and on the Pacific Coast and Oregon.

For further particulars, address

John C. Spry

Room 1003 Harris Trust Bldg.,

Chicago, Illinois

WM. E. LITCHFIELD

MASON BUILDING, BOSTON, MASS.

Specialist in Hardwoods

Manufacturers are requested to supply lists of stock for sale

R.E. Wood Lumber Company

☞ Manufacturers of Yellow Poplar, Oak, Chestnut, Hemlock and White Pine.

☞ We own our own stumpage and operate our own mills.

☞ Correspondence solicited and inquiries promptly answered.

GENERAL OFFICES:
CONTINENTAL BUILDING.

Baltimore, Maryland

CYPRESS LUMBER

1s and 2s: 5/4"....	21845	Selects: 8/4".....	2620
6/4".....	8000	Shop: 5/4".....	715
8/4".....	3220	6/4".....	13925
Tank: 8/4".....	8360	8/4".....	4340
Selects: 5/4".....	39320	Common: 5/4".....	142370
6/4".....	11500	6/4".....	50925

RUSSE & BURGESS, Inc.
Memphis, Tennessee

POPLAR

4/4 to 12/4, All Grades

We also manufacture Oak and Gum

If you appreciate quality and service,
we will hold your business

Faust Bros. Lumber Co.

SALES OFFICE:
CHICAGO, ILL.

MAIN OFFICE:
PADUCAH, KY.

E. F. PERRY
Manager

LOUIS H. PARKER
Asst. Manager

ESTABLISHED 1892

Lumber Underwriters

Every Kind and Form of

FIRE INSURANCE

FOR LUMBERMEN

66 Broadway

New York



Table of Contents



COVER PICTURE:—Mount Hood.

REVIEW AND OUTLOOK:

General Market Conditions.....	15
Wilson Inspires Confidence.....	15
Quashed at the Last Moment.....	16
Front Cover Picture,—Mt. Hood.....	16
Government Price List Discontinued.....	16
An Insight Into Foreign Credits.....	16
Poor Products Are Poor Advertising.....	17
Accurate Knowledge Required in Introducing New Woods.....	17
Substitute for Circassian Walnut.....	17
An Unfair Influence.....	18
Must the Lumberman Be a Banker?.....	18
As Predicted.....	18

CARTOON:—The Democratic Sunrise..... 19

SPECIAL ARTICLES:

German East African Cedar.....	21
With the Veteran Panel Man.....	22
Car Statistics March 1.....	22
Woods Used for Walking Sticks.....	23
A Wholesaler's View of Co-Operation.....	24
Traffic Matters Around Memphis.....	25
Ebonies of Commerce.....	26
Metal Not Strong Enough in this Case.....	26
Woods Used for Shuttles.....	28
One Source of Flagrant Waste.....	27-28
Circassian Walnut.....	29
Flooring Factories Progressive.....	37

LUMBER ASSOCIATION MEETINGS:

Chicago Lumbermen's Association.....	21-22
National Wholesale Lumber Dealers' Association.....	30-36
Miscellaneous.....	38-39

THE MAIL BAG.....	38
NEWS MISCELLANY.....	38-43
HARDWOOD NEWS NOTES.....	43-49
HARDWOOD MARKET.....	49-53

SUBSCRIPTION TERMS: In the United States and its possessions, and Canada, \$2.00 the year; in foreign countries, \$1.00 extra postage.

In conformity with the rules of the postoffice department, subscriptions are payable in advance, and in default of written orders to the contrary, are continued at our option.

Instructions for renewal, discontinuance, or change of address, should be sent one week before the date they are to go into effect. Both old and new addresses must be given.

Both display and classified advertising rates furnished upon application. Advertising copy must be received five days in advance of publication dates.

Entered as second-class matter May 26, 1902, at the postoffice at Chicago, Ill., under act of March 3, 1879.

OAK FLOORING

Kiln-
Dried

Polished



Hollow
Backed
and
Bundled

ICHABOD T. WILLIAMS & SONS

**Foreign and Domestic Woods
In Logs, Lumber and Veneers**

11th Ave. and 25th Street
NEW YORK

910 So. Michigan Avenue
CHICAGO



Hardwood Record



Published in the Interest of the American Hardwood Forests, the Products thereof, and Logging, Saw Mill and Wood-Working Machinery, on the 10th and 25th of each Month, by

THE HARDWOOD COMPANY

Henry H. Gibson, Editor and Manager
Edwin W. Meeker } Associate Editors
Hu Maxwell }

Entire Seventh Floor Ellsworth Building
537 So. Dearborn Street, CHICAGO
Telephones: Harrison 8086-8087-8088

Vol. XXXV

CHICAGO, MARCH 10, 1913

No. 10



Review and Outlook



General Market Conditions

ACTIVE INQUIRY AND PURCHASES have marked trade of the past two weeks, but there is no noticeable inclination in quite a few of the larger markets to purchase only according to immediate requirements rather than buy large stocks for future use. The wisdom of this policy on the part of the buying contingent of the lumber trade is very justly open to criticism inasmuch as such a policy is confessedly because buyers anticipate a break in present hardwood market prices. As iterated and reiterated numerous times in this column, the best evidence obtainable leaves no room for doubt as to the impossibility of there being any general recession in hardwood values for at least six months to come. It is not likely that the best element in the hardwood trade will make great efforts to raise present values to any great extent. There is absolutely no reason to believe that the present level will not be maintained or slightly increased.

Reports continue to come from the North that the log input has been disappointing in a good many sections, and that northern mills will not, in many cases, cut the amount of lumber which they had anticipated. Continued difficulty of logging is still noted in many southern points, and in fact the only really favorable logging conditions prevail in the southeastern hardwood sections, where favorable tides have brought down very satisfactory quantities of logs in rafts and drives.

The month of February was reported in most quarters as exceeding in demand and values the same month in 1912 by a very favorable margin. That month closes and March opens with an excellent demand from practically every source of consumption. Railroads are reporting plans for extensive improvements, such reports being issued from different railroad headquarters continuously. These improvements and additions embrace expenditures in rolling stock equipment as well as in stations, bridges and smaller structures.

All furniture exhibits during the past winter have been marked by unusually favorable purchases, and the demand for material by furniture houses is consequently very satisfactory.

Actual purchases until recently on the part of automobile manufacturers were not active inasmuch as these manufacturers were rather waiting the termination of the many automobile shows taking place in different parts of the country. However, the order books of most of the leading auto manufacturers in the country show that their outputs will be decidedly increased during the coming year.

No new conditions have developed regarding the export trade. Foreign business conditions continue on a par with the condition which has maintained for some time. Until recently the Scottish trade was held up and considerable confusion resulted from the

strike on the part of the Scottish draymen, but the latest advices are to the effect that the dispute has been settled by arbitration, and it is anticipated that former favorable conditions will soon make themselves manifest.

A general survey of this country reveals continued shortage of stock at practically all points, and in all woods with the exception of red gum in the better grades. Handlers of this wood report that there is some little accumulation.

The late winter has somewhat retarded the opening up of building operations, although reports from practically every important city in the country reveal the fact that building permits provide for decidedly increased building operations. Fifty of the largest cities report building contracts let during February which will average a ten per cent increase over operations for February 1912.

Wilson Inspires Confidence

A REMARKABLE UNDERTONE OF CONFIDENCE in the new administration at Washington is apparent throughout the country and the personality of our new President, his straightforwardness and apparent honesty of purpose have resulted in a sentiment distinctly favorable in all business circles. It is interesting to note, however, that invariably any comment on the change of administration treats of the new President as an individual rather than as an adherent to a political party so long in the background of national politics. It would appear from this that the body politic did not necessarily elect a Democratic administration but rather elected Woodrow Wilson, the man. That this feeling is justified is borne out by the expression of the new President in his inaugural address. He does not hesitate in saying that the interests of the country will receive first consideration rather than party interests. Judging from the way in which he has adhered to his promises in his past political connections, it is perfectly safe to expect that he will make every honest effort to put into effect such policies as he commits himself to.

The recent election and the change of administration have had some effect on business in some quarters, but the most pessimistic will not claim that it has had the deterring influence which is usually so apparent. Uncertainty has been the main contributing factor to any uneasiness of this kind and now that the new President has actually taken the administrative chair and has given some clew as to his ideas and intentions, there is still no apparent reason for legitimate business to have any apprehension as to what the newly elected administration may do.

In his inaugural address, which will undoubtedly in future years be considered as a classic ranking almost with Lincoln's Gettysburg address, President Wilson makes a direct and frank appeal for the

support of every forward-looking man imbued with a spirit of patriotism and there is no excuse for any honest citizen withholding such co-operation to the extent to which he has the power to give it, whether it be in the matter of mere moral support or through the medium of more powerful political influence. We have a democratic president and in spite of all dire forebodings he "looks good."

Front Cover Picture,—Mount Hood

THE ILLUSTRATION ON THE FRONT COVER of this issue of *HARDWOOD RECORD* presents a scene familiar to most readers. Those who have not seen Mt. Hood itself are acquainted with it through pictures. It had a prominent place in the geographies which most of us thumbed in the public schools; and in later years railroads, land companies, and promoters of northwestern resources have been liberal in their use of the conspicuous mountain as a center piece for some of their finest representations of scenery.

The great mountain is set for show. Rising to a height variously estimated at from 11,225 to 12,000 feet, it looms vast on the horizon when seen from the Willamette valley forty or fifty miles west. It stands head and shoulders above all the peaks and ridges of the region within a radius of fifty miles, and has no rival or competitor between Mt. Ranier, far north of the Columbia river, and Mt. Shasta which marks the termination of the Sierra Nevadas in northern California. The peak is an extinct volcano, and occupies a prominent place in a volcanic region of vast extent and formerly of great activity. The last glow of subterranean fire died out ages ago, and fields of lava now mark the course and direction of the flows which once inundated immense areas.

When seen from a distance, the shape of Mt. Hood betrays its volcanic origin. The long, gentle slopes lead to the peak from all sides. Ravines have formed low down the slopes, and these measure the amount of erosion which has taken place since the mountain-building process ended. The time since then cannot be measured in years, for human history is silent; but the work of weather and of running water shows that ages have passed since erosion began and the fires ceased their activity.

Though vast periods of time are recorded on the peak's face, yet Mt. Hood is young, as the ages of mountains are measured. Compared with some of the mountains of the eastern part of the continent—the Blue Ridge, for instance—it is an infant beside a Methuselah. Erosion has as yet had time only to scratch the surface of the western peak, but it has worn the Blue Ridge to the roots; has taken enough from its summit to overtop Mt. Hood.

A visit to Mt. Hood adds greatly to one's appreciation of its vastness and solitude when it is afterwards viewed from a distance. Most eastern people who have made its acquaintance have not been much nearer than Portland or the Willamette valley. From that distance in clear weather it shows grandly, particularly late in the afternoon when the sunshine is at the proper angle to give color to the snow and rocks.

Quashed at the Last Moment

ONE OF THE LAST ACTS of ex-President Taft before handing over the reins of government to President Wilson was his veto of the Sundry Civil Appropriation bill, which contained two amendments that would have resulted in rank class legislation. These amendments were introduced by representatives and each passed the House with a good majority. The first provided that no part of the appropriation should be expended in the prosecution of any organization or individual for entering into any combination or agreement having in view an increase of wages, shortening of hours, or bettering the conditions of labor, or for any act done in furtherance thereof, not in itself unlawful. The second provided that no part of the appropriation should be expended for the prosecution of producers of farm products or associations of farmers who co-operate or organize in an effort to obtain and maintain a fair and reasonable price for their products. These two amendments are so flagrantly in the interests of classes that it is difficult to conceive what influenced the House of Representatives to let them get by. The only reasonable excuse is that the labor and farmers' vote looked too good to them

to sacrifice. At the same time, an unpleasant spectacle is offered in the efforts of our national House of Representatives to pass such legislation while its courts are actively engaged in an effort to secure some evidence that would tend to prove that members of the lumber trade should pay excessive fines or go to jail because they have merely been trying to insure themselves a fair living out of the sale of their products.

Government Price List Discontinued

THE UNITED STATES FOREST SERVICE has recently announced that henceforth it will not publish the quarterly list of lumber prices which it has issued for five years. These lists were started in 1908 and originally were issued monthly. While in some instances they have not conformed to the ideas of all as to exact values, they have for the most part been an accurate guide to lumber prices throughout the country. They have been based on a vast amount of information obtained not from a limited number of concerns, but from representative mills in each lumber producing territory. The work has unquestionably been of material benefit to everybody connected with the manufacture, sale or consumption of forest products. At the same time, the Government has repeatedly announced that returns were not coming in as satisfactorily as it desired and that if the lumber trade would co-operate to a greater extent, the price lists could be made much more authentic than heretofore.

The reason given for the discontinuance of their publication is that various individuals and associations have undertaken the work of securing the survey of market values and that with these organizations in the field, there is no real use for the Government's continuing the work. It may be that the efforts to make a substantial cut in the the service. The Forest Service is undoubtedly better equipped than any association or individual could be to secure this information and it is surely to be regretted that it has felt it necessary to discontinue the work. It may be that the efforts to make a substantial cut in the appropriation for forestry work has had some effect in influencing the minds of those in charge of this matter.

An Insight Into Foreign Credits

THE AMERICAN EXPORTER is admittedly weak in his knowledge of the credit of prospective foreign customers. With characteristic American egotism it is considered that American business methods and American ingenuity of manufacture would successfully take care of the sale of his products, and for this reason he has not given his foreign sales department or his foreign credit department the attention which it justly merits.

In contrast to the policy of the American exporter, the painstaking efforts on the part of the British Government to closely analyze foreign markets is distinctly brought out, particularly in South America. These efforts have resulted in the acquisition of a vast trade to South American countries both from England and from Germany, while on the other hand American exporters, although they ship considerable quantities to the countries in South America, are not assured of a continuous and steady market there. This is merely an instance illustrating the lack of attention given to foreign market conditions and credits.

Exporters should be interested then in a publication of very practical value, which has just been issued by the Bureau of Foreign and Domestic Commerce at Washington. It deals with the much discussed credit problem, but presents it in a new way.

A part of the book is devoted to an exposition, by Commercial Agent Archibald J. Wolf, of credit methods and facilities in Germany, England and France, in which he shows how and by whom long terms of credit are granted in the export markets, what facilities make these extended credits possible, and the advantages and disadvantages of the system.

There is also included a review of present methods of financing foreign shipments from the United States, and an analysis of numerous letters from American manufacturers with regard to their credit practice in the export trade.

Furthermore, an important series of consular reports from all

parts of the world are included. In these reports the American consular officers describe fully local conditions. Thus the subject is considered from different angles, and the reader is given an accurate idea of what the exporters in foreign countries can and cannot do in granting credit; what American exporters are doing and can do, and what the foreign importer is accustomed to expect in the matter of credit from the American exporter.

As a supplement, the book is equipped with examples of forms for use in financing foreign shipments, and lists of banks in the United States having foreign departments, and foreign banks undertaking the collection of drafts.

The report presents the general foundations and principles involved, and also gives definite data that is of immediate practical value. It presents no ready-made solution for the credit problem, but sets forth rather the facts, and outlines the principles that should govern foreign credit dealings.

This publication as stated is issued from Washington under the direction of the superintendent of documents at the government printing office. The Government has been successful in issuing a multitude of publications of considerable importance practically at the mechanical cost involved. The book in question can be secured for the sum of thirty cents, which expenditure should be well justified by the vast amount of information it contains as enumerated above.

Poor Products Are Poor Advertising

IN A RECENT ISSUE of a Canadian contemporary is given an illustration of a door manufactured in this country, which is accompanied by a paragraph stating that the door was made of sugar pine with birch veneered panels, and that the veneer was warping and pulling loose due to poor quality of glue and workmanship. The article suggests that this is the character of a great deal of millwork sold on Canadian markets by American houses and that Canadian manufacturers of such products should make every effort to give publicity to these features with the idea of securing such trade for local manufacturers rather than letting it get out of the Dominion.

HARDWOOD RECORD does not believe that in any line of business knocking a competitor's products is good selling talk. It does not believe that the average American manufacturer of doors of any character turns out the line of goods as intimated in the article referred to. Nevertheless, American manufacturers shipping any line of finished product to any foreign country, either on this continent or abroad, should bear in mind the human proclivity to see the bad things in the world rather than the good. We are constantly led to believe that the world is growing worse because the newspapers give more publicity to murders, divorce and similar scandals. In the same way, a foreign manufacturer of products similar to those manufactured in this country might very readily use a few scattered cases in which poor articles were furnished the Canadian trade as evidence that American manufacturers are not up to the mark in quality of production and workmanship. There is undoubtedly a tendency among American manufacturers in all lines, not alone the lines dealing with forest products, to occasionally give too little attention to the character of the work going into the manufacture of products for export when such export market has actually been secured. The average American is perhaps fooled by the remarkable growth of industries and commerce of the United States into the belief that no other country is so well equipped to turn out as high class an article as is

our own; but in this he is far from right. The American manufacturer in all lines must lend every effort if he wishes to maintain the prestige enjoyed at present in all foreign markets by the American goods.

Accurate Knowledge Required in Introducing New Species

AN ADDRESS WAS RECENTLY DELIVERED by a prominent Londoner, treating of the efforts on the part of Australian manufacturers of forest products to introduce such products into English and European markets. There is a wealth of timber in Australia, particularly of hardwood. A good deal of this timber is of excellent quality. Australian interests have succeeded in establishing an extensive and elaborate testing laboratory in which woods from the various species are given crucial tests through which can be demonstrated their utility in different lines. Armed with reports of these tests, Australians have invaded European and English markets with the idea of demonstrating that the qualities of Australian timber entitle such species to general use in those markets. The success of these pioneers has not been very marked. The address referred to criticizes the method of introduction, stating that the average consumer is not at all interested in the mechanical properties of wood, but wants to know merely the color and general character of the wood texture.

HARDWOOD RECORD cannot subscribe to this, inasmuch as it has been its contention for years that knowledge of the adaptability of certain wood species for certain purposes and that the only way of acquiring this knowledge is through an intimate study of the structure of the wood of different species. Without technical data, the introduction of new species is based on mere guess-work. A certain wood will appear to resemble another more prominent species in color and character and for that reason it is supposed that

it will be readily adapted to the uses for which the old species is marketed. In many cases where a new wood is thus introduced, it will fall down absolutely when put to the test in the finished article.

No one will maintain that the efforts of the Forest Service in this country in the matter of supplying such intimate technical knowledge of wood structure have not been of vast importance and benefit to the lumber industry. Therefore the successful introduction of an unknown species requires first, accurate and reliable data as to the technical character of the wood, which data should, however, be couched as much as possible in practical terms; second, an intimate and practical knowledge of all the fields to which this wood might be successfully applied.

Substitutes for Circassian Walnut

ELSEWHERE IN THIS ISSUE of HARDWOOD RECORD may be found a review or synopsis of a circular on Circassian walnut published by the Forest Service. Users and admirers of this beautiful wood have long felt the need of more exact information concerning sources of supply, and the character and qualities of the product. It has been known in a general way what Circassian walnut is, and whence it comes, but many things relating to the wood itself and to the business of procuring and marketing it have not been clearly understood. The circular goes somewhat minutely into several of these matters. One point in particular will surprise many persons; for it is shown that English walnut which produces the nuts of commerce, French walnut, and that from Italy and Austria, are all the same

UNSOLICITED TESTIMONIAL

University of Missouri Columbia

COLLEGE OF AGRICULTURE
Department of Forestry

March 3, 1913.

Hardwood Record,
Chicago, Ill.
Gentlemen:

I want to thank you for your kindness in sending us the copies of Hardwood Record which we failed to get just after Christmas. I consider it one of the very best papers in the work I am handling here at the Forestry School that I can get.

Very truly yours,
ERNEST C. PEGG,
Instructor in Forestry.

species botanically. The principle difference is that Circassian walnut, as the wood is known to the trade, comes from forest-grown trees in their native home among the mountains of Turkey, Persia, and southeastern Russia, while the others are planted stock, the wood of which never equals that from the native range.

A point touched somewhat incidentally in the Forest Service circular is worth attention. It relates to imitations of Circassian walnut, and two well-known American woods are shown to bear close resemblance to the oriental product. They are butternut and red gum. The former does not appear to have been much employed as a substitute, but its color and grain match well with those of the eastern species, except specimens of the finest figure which may be readily distinguished from the best butternut. Red gum has been extensively employed as a substitute for Circassian walnut. The figure when carefully selected needs no doctoring to make it pass for the genuine article. Experts can tell the difference upon close and careful inspection, but the ordinary observer cannot. Large quantities of red gum successfully and satisfactorily pass as Circassian walnut in the markets of this and other countries when worked into products, such as furniture and interior finish.

The question may naturally be asked why it is necessary to sell red gum as a substitute or imitation. Why cannot the wood stand on its own merits? If it is as handsome and as serviceable as the genuine Circassian walnut, and such seems to be the case, why not sell the gum under its own name, on its own merit, and let it achieve a reputation for itself? It has been exploited under other names long enough and it is time for it to come into its own. It has been bought and sold in Europe for a long time as satin walnut, though botanists know of no tree by that name. The evident purpose of those who use the name is to pass the gum as some form or variety of Circassian, English, French, or Italian walnut, all of them being the same wood under different names. It is sold across the water as hazel pine or hazel wood also, which is clearly an attempt at disguise, though, strictly speaking, it is not a misrepresentation because red gum belongs to the hazel family, and is a first cousin of the small witch hazel of this country.

An Unfair Influence

THE FORWARD PROGRESS of civilization is necessarily marked by changes in methods of manufacture and in the raw materials used in all lines. These changes sometimes result in a distinct advantage to humanity but occasionally, on the other hand, the substitution of one character of raw material for another means the introduction of a commodity which is not as well qualified to meet the requirements as is the deposed raw material, and this introduction effects an unjust hardship to the manufacturers of such raw material. At any rate, the question will eventually resolve itself into a proper adjustment according to which each material will find its proper sphere of usefulness, and its encroachment on the domain of some other raw material will be limited. But this process of evolution should be natural and not stimulated artificially. It is to be regretted that any body of men possessing power of a certain kind but not directly interested in one class of raw material as opposed to another should throw its weight in the interests of the producers of one of those classes.

It has been suggested that the leading architects of the country through their organizations are lending their support to reinforced concrete construction as opposed to mill construction, the idea being that the less efficient architects are not equipped to design and supervise the erection of intricate reinforced concrete construction. The result of such a plan, if it were successfully carried through, is apparent. With the powerful influence of the big architects of the country working for the elimination of mill construction as far as possible and adhering to concrete construction, the effect upon the lumber business would be tremendous.

Must the Lumberman Be a Banker?

CONSIDERING THE WAY in which terms of sale are treated, the answer to the above query would be "yes." This is a question which has commanded the attention of the trade for a long time and it seems as far as ever from any concrete solution. Various associations at various times have inaugurated terms of sale

which govern the question theoretically very satisfactorily, but it seems to be an impossibility to legislate into the purchasers of lumber the practice of adhering to the terms of sale on which they buy their stock. The present and generally prevalent practice of ignoring discount terms and taking from ten to thirty days' additional time with the discount is a serious thing with the lumber trade and means in the aggregate immense loss of actual money. The average lumberman is forced to carry a considerable percentage of his trade for indefinite periods beyond the period of discount.

It would seem that the ideal terms of sale would provide for no discount whatever, although it is conceded that this idea is somewhat Utopian. It is presumed when the lumberman sells a bill of lumber that the stock is worth the price that he charges for it. Hence, it is difficult to see, considering the question in a theoretical way, why he should be forced to strike off two per cent discount. It is recognized that such a procedure, however, would be out of the question when applied to practical business methods. The reason for the discount provision is partly with a view of weeding out the good accounts from the bad. It is partly a matter of custom and partly a mere recognition of that human proclivity to consider the prompt payment of just debts something which we are not in any way morally bound to carry out.

Looking at the question from the first standpoint, the discount is a good indicator of whom not to sell to. As a general thing, a man who makes a practice of ignoring terms of sale and of not discounting his bills should be watched pretty closely in other matters. The habit of overlooking discounts would indicate either that he has insufficient capital or that he is morally a little off color in his business relations. Of course, if he is at fault in the latter particular, there is no apparent remedy. If, however, he is operating on an insufficient capital, but is sound morally and generally trustworthy, it would seem that the logical thing for him to do would be to borrow sufficient additional capital on a four to six months' basis to discount his bills. He would find that the difference between what he had to pay on borrowed money at six per cent annually and the saving he would effect through securing two per cent discount for payment within fifteen days of the shipment of lumber would be considerable.

As Predicted

AT VARIOUS TIMES IN THE PAST, **HARDWOOD RECORD** has had occasion to comment editorially upon the character of a certain so-called lumber company operating under the style of the International Lumber and Development Company, with headquarters at Philadelphia. **HARDWOOD RECORD** was never able to see anything in the nature of an honest, straightforward business proposition in this company and said so emphatically. These predictions have been backed up by proceedings against this concern during the past year, the latest news emanating from the court room where these proceedings are being held, being dated March 3. United States District Attorney Swartley on that date outlined the government's case against this company, proving beyond any reasonable doubt that the defendants defrauded stockholders out of \$6,000,000 by false representation and misleading literature circulated through the mails. It was shown that the reported immense holdings of the company in Mexico were fictitious and it was further proven that the semi-annual dividends paid by the company were paid out of money received for stock sales rather than out of profits. The district attorney submitted evidence to show that no actual dividends were earned in two years' operation. It was further shown that the reported cut of this company exceeded by two-thirds the actual cut, and further that the lumber manufactured was sawed from timber not cut on the company's lands, as had been claimed. The ridiculousness of some of the defendant's claims is instanced in the widely circulated reports of its immense international fleet; it was shown that this fleet consisted of one steamer, one launch, two sailboats and two rowboats.

There is only one possible outcome for these proceedings, and they serve as a striking illustration of the fact that "murder will out."



Pert, Pertinent and Impertinent



THE DEMOCRATIC SUNRISE



"I Can Use That Money Now, But I Wonder If It Isn't Preparing a Load for the Little Shoulders That Must Bear the Burden Later"



Meeting of Chicago Association



Editor's Note

The lumber trade is not so much concerned with the present condition of business, for present activity is too apparent to leave room for doubt. On the other hand, however, lumbermen seem to be seeking information as to the future trend of the lumber business, both in the immediate future and during the next few years. The following article contains an unusually able speech by J. E. Rhodes, in which the question is analyzed in an authoritative and complete manner.

The monthly meeting of the Lumbermen's Association of Chicago, held at the Hotel La Salle on Tuesday, February 25, was productive of unusually profitable information and discussions. The meeting was preceded by the usual pleasing luncheon.

Immediately following the gastronomic feats, the newly-elected president, Murdock MacLeod, opened the business session, outlining in a general way the plans having to do with the regular meetings of the association for the coming year. With the exception of the summer months, the year will be marked by a meeting every thirty days in conjunction with a luncheon or supper.

Mr. MacLeod suggested that there are a multitude of subjects which can be profitably brought up at such sessions, and that it is his aim at future meetings to have a discussion of market conditions and general business conditions having a bearing on the lumber business.

President MacLeod then introduced J. E. Rhodes, secretary of the National Lumber Manufacturers' Association.

Mr. Rhodes first said that Chicago is recognized as the largest lumber market in the world, and further that he fully appreciates the conditions which have made possible the transferral of his personal interests to Chicago. He outlined the purposes and personnel of the National association, showing that it is designed only for the consideration and treatment of problems of national interest, and that it does not consider in its scope the consideration of the smaller questions and details of the various branches of the lumber business. He told of the varied and extensive interests making up the membership of the National association as embodied in the various allied associations belonging to it.

Mr. Rhodes referred to the maintenance of a credit rating department by the association as one of its most important features, and said that in the near future the Blue Book, published by the National Manufacturers' Credit Corporation, a subsidiary to the National Lumber Manufacturers' Association, will open a branch office in Chicago.

Referring to the long anticipated forest products exposition, the speaker said that it has been decided that the possibility of the early inauguration of a general lumber advertising campaign is precluded by the lack of available funds, but stated further that in place of inaugurating such a campaign, active steps are being taken to put into concrete shape plans for the proposed lumber products exposition. He said that the first exhibition will be made in Chicago next fall.

Referring to the scope of the National association's efforts, Mr. Rhodes said that his organization is lending every aid possible to the general move for the purpose of removing the national tariff question from politics, and in favor of creating a permanent tariff commission to adjust tariff questions and rates in a logical and businesslike manner, independently of political conditions.

Another national question to which the association is lending its strong support is monetary reform; the revision of the present Sherman anti-trust law is also being advocated. The speaker said that if these three questions can be carried to a conclusion in keeping with the desires of the important business element of the country, the possibility of financial panics will be eliminated, and the only hard times will come from crop failures, wars and similar national catastrophes beyond the control of mankind.

The speaker then proceeded to a discussion of general market conditions. He said that with a membership of 1,400 large saw-mills cutting 13,000,000 feet of lumber annually, there can be no room for doubt as to the absolute groundlessness of the suggestion that there is a lumber trust maintained by large lumber operators, who are members of the association. He further said that the

government's census report shows that there are 36,000 large mills operating in the United States, which cut a total in 1910 of 36,000,000,000 feet of lumber. The idea of such a multitude of individual concerns being controlled by any concentrated interest is too absurd to be worthy of consideration.

In speaking of Pacific coast conditions, Mr. Rhodes said that this section of the lumber industry suffered heavily following the panic of 1907. Its products were sold below cost in many cases, and a multitude of firms failed. Business there has attained a satisfactory status only within the last six months. According to the speaker there is every reason for believing that this condition will be maintained for at least six months to come. The hard winter in the logging districts of Washington affected a very decided shortage in fir logs, and in consequence of this, in addition to the healthy demand, prices have been steadily advancing for some time.

The speaker's analysis of the effect of the Panama Canal on the general lumber business was particularly able. He maintained that no direct effect will be felt for at least five years, arguing that in order to ship lumber through the canal from the Pacific coast points to the eastern markets it is absolutely essential that boats carrying as large a load as 5,000,000 feet, and capable of being loaded and unloaded in two days be built. The present boats being used are generally speaking much smaller than this, and practically without exception require as much as three weeks for loading and unloading. It would hence be manifestly necessary to have return cargo in order to operate these craft at a profit.

Under present conditions there is no cargo that could be taken back with the exception of coal, and inasmuch as the Pacific coast sections are producing considerable quantities of coal, any effort to ship these would hardly be successful. Another serious drawback would be inadequate wharfage to receive large shipments of Pacific coast stuff at eastern ports.

Mr. Rhodes qualified his remarks with the statement that what he had said applied to Pacific coast lumber, but that Pacific coast timber would, as in the past, be extensively used in eastern points. Mr. Rhodes said there is anticipated on the coast an advance on stumpage within the next year, which would result in a decided advance in Pacific coast lumber products. Any increase on these products would result in proportionate increases on all lumber products.

The speaker next analyzed conditions in the yellow pine field, stating that the apex of yellow pine production was reached in 1909, when the yellow pine cut was more than one-half of the total cut of the country. Conditions in yellow pine have a direct effect on conditions of all classes of lumber marketing. He said that in addition to the naturally forced reduced cut, the marvelous development of the South calls for an increasing amount of lumber for local consumption. He made the interesting observation that the state of Texas now consumes more lumber than it produces.

In analyzing the yellow pine values, the speaker said that the average price of yellow pine at the mills is at present from \$17.50 to \$19.50, and that it is anticipated there will be a rise in values from one to two dollars in the not far distant future.

Mr. Rhodes said that in 1911 twenty-eight yellow pine mills began operating, and that they cut during that year 156,000,000 feet of lumber, but he said that during the same period, ninety-seven yellow pine mills cut out their timber entirely, which mills had manufactured during that year 500,000,000 feet. Two hundred and fifty large yellow pine mills cut seven per cent more in 1912 than in 1911, but they shipped ten per cent more.

In speaking of northern pine, the speaker said that in 1911 the

cut was 1,500,000,000 feet, and in 1912, 1,000,000,000 feet, and that on January 1, 1913, there were \$18,000,000 feet of northern pine lumber on hand, but that this was 160,000,000 feet less than on January 1, 1912.

In speaking of the cut and shipments of northern hemlock and hardwood, the speaker said that the total hemlock and hardwood cut was nine per cent less in 1912 than 1911 and the shipments twenty-eight per cent more.

In referring to the Inland Empire, where mills are manufacturing white pine, Mr. Rhodes stated that cut and shipments had both increased satisfactorily, but that shipments have increased at double the rate of cut. He stated that the pine of the Inland Empire will be an increasing factor in the eastern markets, and that stock at present is very scarce.

In speaking of conditions in the hardwood field, Mr. Rhodes stated that the open winter in the North has militated seriously against getting in a satisfactory amount of logs, and that while operators had anticipated a large cut this year, they will actually manufacture a decreased amount of lumber.

Mr. Rhodes said that the increasing population and the decreasing timber supply have a constant tendency toward raising prices, and said further that increased values are more or less periodic, the trade now experiencing one of these periods.

The speaker maintained that lumber prices would never be as low as they had been in the past. This increased value has a future significance in that with the greater value of forest products more attention must be directed toward perpetuating the supply. He said that we are merely repeating history as is shown in forest conditions in Germany. The growing worth of the product of the forest, and hence their growing economic importance to the nation, will necessarily result in a strengthening sentiment on the part of the public demanding some voice in the administration of the lumber industry. He said that this sentiment will take the form of a demand for government supervision of manufacture of privately owned timber, of the timber tax question, forestry, forest fires, etc. He said that while the question is not immediately imminent, it is commanding increased attention constantly.

He said that the present excellent condition of the lumber business is but a step in the development of this ultimate condition, and that eventually cut will be regulated by forest growth, and prices will be extremely high. The larger lumber interests of the country having a long time investment in forest lands are treating this question broadly, and are already considering the practicability of administration along more advanced lines.

Mr. Rhodes made the startling statement that in twenty-five years yellow pine manufacture as a national industry will be no more, and that at the end of that time it will have been reduced entirely to a local status, but that it will always be maintained as an industry treating of local interests.

Mr. Rhodes closed his remarks with the assertion that never before in the history of the lumber business have conditions been so generally good as now. In all sections of the country, where is manufactured every kind of forest product included in American lumbering, the demand is actually in excess of supply.

Following Mr. Rhodes' talk, in answering a question as to the effect government owned timber will have on the lumber business when marketed, he said that one-third of the standing timber is owned by the government, but that it has thus far been sold in small lots at prevailing market prices. He said that restrictions in logging, which must be recognized by those purchasing government timber, make it difficult to compete with operators in privately owned stock on the part of those cutting and sawing government stumpage. He said that the policy of the Government has always been against the creation of large operations in government timber, and that government lands will never be thrown wide open.

In speaking of the possible effect on shipments of lumber from the Canadian Northwest with the removal of the lumber tariff, Mr. Rhodes said that at present the British Columbian forests have no great amount of lumber which would find a logical market in the United States. He said further that the astounding develop-

ment taking place in Canada will create a market for practically all of the products of the Canadian mills, but the speaker contended that present marine laws in effect in this country, which restrict shipments of products in coastwise trade to vessels of American register and manned by American seamen, is an unjust burden on American manufacture. He said that if these laws are not radically changed, Canadian lumber will on the opening of the Panama canal be marketed extensively in the eastern cities.

George J. Pope then told of the work of the special committee appointed to consider the question of the erection of a building for the housing of lumber concerns and allied industries, which will house also the Lumbermen's Association and the Lumbermen's Club.

E. A. Thornton told of the recent decision on the part of the Interstate Commerce Commission at Washington regarding milling-in-transit tariffs, stating that the creation of milling-in-transit tariffs are now left entirely in the hands of the carriers, who are, however, to be governed entirely by present statutes on this question. He said that shippers should request a voice in the formation of any such tariffs with the idea of insuring their being just to the shipper.

F. L. Brown moved that a resolution be adopted thanking Mr. Rhodes for his able talk.

The meeting then adjourned.

White Cedar from British Guiana

Those who have studied the tree flora of British Guiana are well acquainted with the tree locally called white cedar. It is not one of the cedars so common in the United States, nor is it the Spanish cedar (*Cedrela odorata*), but belongs to the Bignonia family of plants and is known botanically as *Tabebuia longipes* Baker. The Indians in British Guiana call this tree warikuri or waracoori. It is found here and there over the less wet parts of the savannas, and wherever the forests are found on drier ground it is more or less abundant. Along the banks of the rivers that intersect the drier regions it is plentiful. White cedar grows most abundantly up the Lamaha canal that leads into Georgetown. The largest trees usually attain a height of from fifty to seventy feet, and from fifteen to eighteen or twenty-one inches in diameter. The logs generally square about ten inches. With the exception of its bark it bears no resemblance in any of its parts to the red cedar, which is the local name for the Spanish or cigar-box cedar.

White cedar when full grown is a dark brown, hard, heavy, and close-grained wood with a white sap, very durable, especially under ground, but splits on exposure to the sun. It is probably the best wood procurable in British Guiana for foundations. The wood is as easily worked as white pine, and is serviceable for all kinds of indoor work in building. It is also useful as a furniture wood, and where lightness of material is required might be largely used. The grain is straight and fine and the wood takes an excellent polish. Inquiries have been made for the timber for export, to be employed as match wood, for which purpose its lightness and straight grain particularly adapt it. Residents on the rivers use it in house building and for many other purposes. Those who are well acquainted with its qualities and merits say that for interior finish one of its principal recommendations is that it is never attacked by wood ants. This is a very great merit in a tropical country where the white ants are so destructive to wood.

The leaves are simple, about six inches long; the flowers white, of the size and form of the catalpa tree so common in the United States. The flowers are succeeded by elongated pods that are filled with flaky membranous-winged seeds. The white cedar was first described in 1888 and named by Mr. Baker, which proves another of the many instances of very common and useful trees that have awaited so late of *Tabebuia* in British Guiana. These trees resemble *prima vera* which is considered one of the most beautiful trees in tropical America. The white cedar is also highly esteemed for shade and ornament, and recently has been introduced into Georgetown, British Guiana, where it is easily cultivated.

L. L. D.



With the Veteran Panel Man



"I am not much of a word juggler," remarked the veteran panel manufacturer, smiling over an order which had arrived in the afternoon mail, "but it occurs to me that furniture dealers handling the output of a concern we have just heard from are going to have the job of explaining about veneered goods simplified a good deal."

"What's the system?" inquired a visitor who had dropped in to pass the time of day.

"Selling veneered oak or mahogany, as the case may be," he replied, chuckling, "for solid without making any misstatements about it. It saves time and conscience, I suspect."

"But don't you believe," broke in the other, "that it's best to come right out and tell the ultimate consumer that veneered work is veneered, and why it is better than the other kind? Why run the risks incident to deception of that kind when the benefits are so negligible?"

"That's all right, too," said the panel expert; "but what I have in mind is perfectly legitimate. As you will see by this order, we are going to supply some tops and panels for this furniture house, and are going to use oak cores, along with our figured quartered oak faces; so that it will be a plain matter of fact to say that the furniture is made of solid oak, since nothing but oak will have been used in producing it."

"You think, then," suggested the inquirer, "that this is going to be a case where discretion is the better part of valor, and where diplomacy will beat a stuffed club?"

"That's about it," was the reply, "although I am far from urging a retail dealer to back down and out on the question of the advantages of veneered goods. The trouble is that most of them are too willing to do it anyway, and goods made up under the specifications of this order enable them to make their selling talk truthful and at the same time accord with what may be the prejudices of the customer."

"Speaking of the use of cores of the same material as the face veneers, the practice is getting to be rather general. In fine work particularly it is desired, as this makes it unnecessary to veneer the edges of the panel or to band-rim the core with material similar to the face. Of course, the cross-banding is exposed, but its thickness is not great enough to cause any trouble. A lot of mahogany panels are now made up with mahogany cores for musical cabinet work. In a good many instances these panels have to be cut out in various ways, exposing edges which would be hard to veneer; and it is thought to be cheaper, as well as more effective, to use mahogany all the way through, instead of trying to save a little on the material and risk an unsatisfactory job."

"Occasionally lumber prices are in favor of using this plan, too. For instance, chestnut is pretty scarce at present, and I have an idea that I may be able to pick up some wormy oak that can be used on this job at a figure little in advance of what the chestnut would have cost. Oak of all kinds is high at present, though, and this may be difficult. But by studying the conditions of the market, the panel man can frequently take advantage of the opportunity to do the job a little better than otherwise and at not a great deal of additional cost."

"It is bad policy, however, to do special work of this kind without making a charge for it. If your customer specifies oak cores, then he ought to pay a price in keeping with the specification. The panel man should be given leeway in the use of core material, and if the consumer takes it upon himself to determine what it shall be, a higher price should be charged than when this feature is left to the discretion of the manufacturer. In the case cited, the oak may cost a good deal more than chestnut cores, and the cost of the panels to the buyer must be increased accordingly. On the other hand, it would be bad policy to make the same charge one time because lumber prices warranted it, and then attempt to raise it another, as a result of changes in the cost of material. It's better to have a general rule on this subject and stick to it."

"Another reason for using cores of the same material as the face veneers is that this material is usually stronger than that ordinarily used for core-stock. In other words, when your panel is going to be subjected to a good deal of strain, it is unwise to put in core material that is not calculated to stand up under it. Table material is frequently made up in this way, because the principal consideration is strength."

"This is a good deal like some furniture manufacturers I know, who are using mahogany to a large extent. They even enamel over mahogany, largely, they say, to avoid the necessity of having to veneer the backs of their drawer fronts. They figure that the cost of the veneering and the cheaper character of the material would make their article less attractive to the trade, and so they go to what seems on the surface to be an unnecessary expense in order to be able to offer something good. That shows knowledge of human nature. A lot of people will buy a mahogany bedroom suite, even if it is enameled, and pay the higher price asked for it, without question. Like the woman who wears hand-embroidered lingerie, nobody sees it, but she knows it's there and gets a lot of satisfaction out of that fact."

"That apparent disregard for material costs is not in keeping with the modern cry about the excessive waste in woodworking plants, is it?" suggested the visitor.

"Well, you know enough about the waste problem to realize that a lot of the talk on the subject is beautiful sunshine," replied the panel man. "Incidentally, I have just declined to renew a contract with a manufacturer of refrigerators to whom I was selling a big quantity of 3/4" three-ply glued-up plain oak panels. They were of exceedingly small dimensions, and when we first landed the order we thought it was going to be a great thing for the factory, and enable us to get rid of a lot of plain oak that would otherwise be a total loss. The price per foot we quoted looked pretty good, compared with the figures on larger panels, which would require the cutting up of fresh sheets."

"We happen to have a cost system that is pretty effective, and by the time figures on all the factors entering into the cost of production were available, we discovered that we were presenting our refrigerator friend with about \$16 on every thousand feet. The cost of handling the small stock, the greater difficulty in working it and the decreased efficiency of our presses in taking care of that kind of stuff operated against its being a profitable venture, and we have dropped the proposition like the proverbial hot potato."

"The only way to make money out of business of that kind would be to charge just as much for the material as we would if no waste were going to be used; and of course the consumer doesn't want to pay as high prices as that would result in."

"I would like to gamble that many people in our business who are burning up a lot of money in labor expense to get value out of their offal will find, if their cost systems serve them properly, that the business isn't going to produce enough of a profit to enable an extra dividend to be declared."

Car Statistics March 1

Statistical bulletin number 139 issued by the American Railway Association states that the total surplus of freight cars March 1, 1913, was 58,529, and the total shortage on the same date was 27,148. The total surplus February 15, 1913, was 52,700 cars, while the total shortage on that date was 30,517 cars. The total surplus February 28, 1912, aggregated 44,984 cars, while the total shortage February 28, 1912, aggregated 37,142 cars.

Compared with the preceding period as last reported in the regular bulletins, there is a decrease in the total surplus of 5,829 cars and further compared with the preceding period, there is a decrease in the total shortage of 3,369 cars. Compared with the same date of 1912 there is an increase in the total surplus of 13,545 and a decrease in the total shortage of 9,994.



Woods Used for Walking Sticks



Walking canes have for many years formed a distinct trade, and the stock exhibited by retail dealers is often very attractive, not only because of the variety of the canes, but also because of the beautiful finish and artistic styles. Hundreds of tons of sticks are cut not only in this country, but are imported from all parts of the world, solely for use as walking canes. Immense quantities are constantly being brought from the East and West Indies, South America, Africa, China, Java, and Singapore. From the latter country come all the varieties of bamboo known in the trade by distinct names, such as the "dog-head"

cane, so called because a portion of the root is left attached to the stick, which, having two protuberances like ears, gives it a striking resemblance to a dog's head. These trade names are not familiar to botanists; they are usually more adapted to convey to the popular mind the appearance of the cane than to indicate the botanical nomenclature. Though so many varieties of bamboo are constantly imported from China and Japan and very largely used, nothing definite is known as to the species producing them. About fifty years ago a very beautiful stick was introduced from Borneo under the name of Rajah cane, the hardness of this stick, together with its beautiful markings of dark lines, caused it at once to become very popular. The name Rajah is said to be derived from the fact of the export duty which the Rajah of Borneo claimed. While enormous quantities of this material were and still are being imported, nothing is known as to its botanical origin further than that it is the stem of a palm.

A favorite cane is made of pimento wood, or allspice (*Pimenta vulgaris*). This is more particularly adapted for umbrella handles owing to its extreme rigidity and strength and its non-liability to warp. This wood is imported from the West Indies often in rather large billets and with a crook, from which a knob or hook is formed. Many of the canes made of orange and lemon wood are also derived from the West Indies and they are among the most highly esteemed of all woods used with the bark on. These are valued on account of the white lines seen so abundantly on the highly polished bark. They are also employed for umbrella handles, the bark being removed and the stick smoothed for this purpose. The orange canes may be easily recognized by the beautiful green bark, with fine white longitudinal markings, and the lemon can be detected by its symmetrical proportions and the regularity and prominence of its knots.

The well-known Malacca cane (*Calamus scipionum*) also makes a very beautiful walking cane. It does not come from Malacca, as its

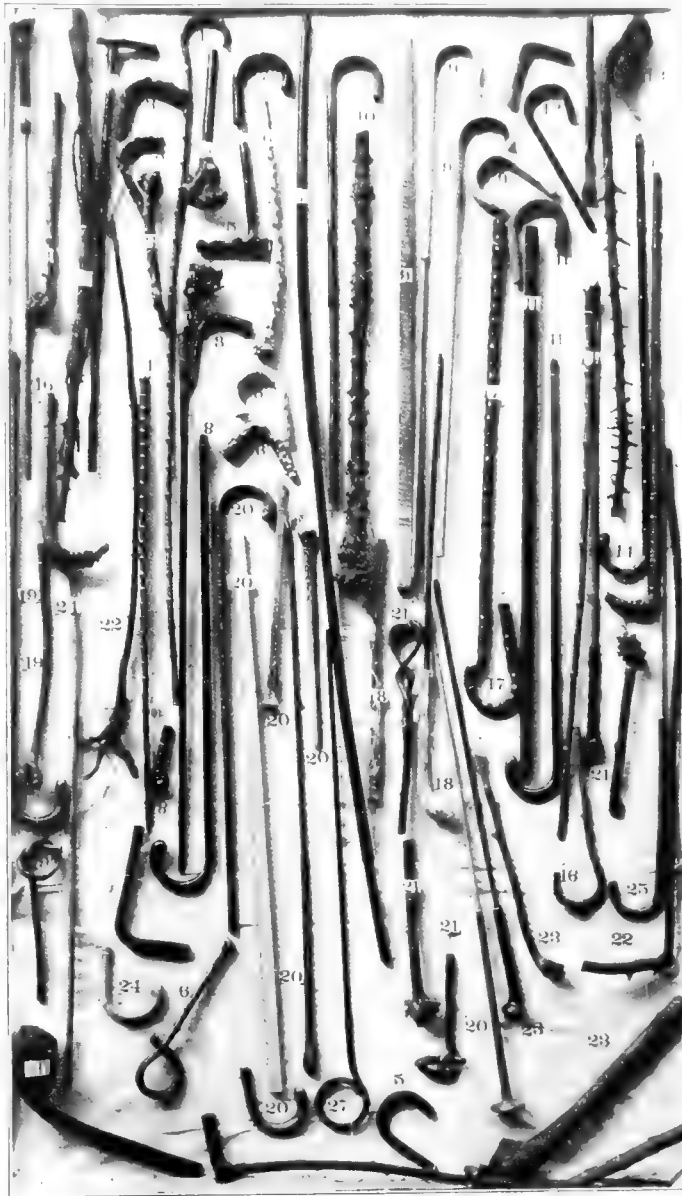
name would indicate, but is imported from Siak in Sumatra. These canes are valued according to the length of their internodes; a perfect stick of the required length taken from between the nodes often brings a very fancy price. A genuine Malacca cane should be finished in the natural wood and have the proper taper. Many of those in the market have had their nodes worked down and after they are stained, painted, and polished, they are extremely difficult, except to a practiced eye, to detect from a natural Malacca cane.

A great many sticks are imported into the United States, either

directly or indirectly, from Algeria, where these kinds are grown for commercial purposes. The kinds derived from Algeria are the pomegranate, olive, myrtle, and the leafstalks of the date palm. All these, especially the olive and myrtle, have been and are still in great demand. In addition to these a number of English-grown sticks are shipped into the United States. The principal ones are ash, oak, elm, holly, hornbeam, blackthorn, cherry, maple, hazel, crab, aspen, box, and the common furze. The medlarwood and chestnut are occasionally imported into this country. Guelder rose (*Fiburnum opulus*) a native of Europe, is sometimes imported under the name of teazle or Balkan Rose. The young saplings of the ash, whether of native or foreign growth prepared with the bark on, often require very little treatment at the hands of the workmen except in forming the heads. After they are cleaned and polished they make excellent canes. Very few of the foreign ash saplings are in their natural condition sufficiently straight for use as walking canes, and require straightening. The Carob (*Ceratonia siliqua*), quantities of which are imported from Algeria, must be straightened by mechanical means. The method of straightening has been described as follows:

"The canes are buried in hot sand over a stove until they become quite pliable. In front of the heap of sand in which the rough sticks are plunged is placed a stout board, five or six feet

long, fixed at an angle inclined from the workman; in the edge of this board are square notches. When the stick has become sufficiently pliable by being buried in the hot sand, the workman places it in one of the notches, and strains and bends it till he has succeeded in producing a perfectly straight stick. In this way the most crooked, and, to all appearance, worthless sticks, are made so straight that the result appears almost impossible, more especially when it is borne in mind that the workman has no other guide but his well-trained eye to help him. When straightened to his satisfaction the sticks are placed on one side and as they cool they become perfectly



CANE AND UMBRELLA HANDLES

rigid." This is an important step in cane manufacture.

The application of heat is an important element in the operation of the cane maker. The same power which makes a crooked stick straight is applied to make a straight one crooked, and the hard, brittle stems of the bamboo, the partridge, and the Rajah canes, as well as the various kinds of material obtained from Europe, where nature has not provided any kind of knob or crook, are by the application of heat curled into the necessary shape to form a handle.

Large quantities of canes are made in England, Germany, France, and other parts of Europe, where they can be made for less than they can be manufactured in this country. For that reason the United States imports many canes in the finished state from the large manufacturers in England and Germany. France ships in here very tastefully-mounted canes, and Germany sends the best kinds of ebony and painted canes of all sorts. For substantial and selected class of canes the German manufacturer is noted, not only at home

but in the foreign markets. Large quantities are exported annually to North and South America, as well as to other parts of the world. The following is a partial list of the woods now used for making canes, classified according to their origin:

Algeria—Olive, myrtle, pomegranate, carob, medlar, orange and lemon, eucalyptus, chestnut, cork, juniper, baytree, date palm leaf stalks, wild bamboo.

Tropical America—Pimento, coffee, flowered ebony, soapwood, briar, supple jack, orange and lemon, yellow sanders, myrtle, snakewood, black torck, gra gra, wild bamboo, niob, greenheart, and sucupira.

England—Blackthorn, oak, crab, warted crab, whitehorn, hazel, maple, furze, ground ash, holly, hornbeam, birch, mountain ash, cherry and dogwood.

China—Ordinary yellow-root bamboo, tonquin reed, Carolina reed, dog-load cane, betel cane, whangoe, whampoa bamboo.

Australia—Midgeo, Cardwell, Loya, bramble.

Other kinds from the East—Partridge cane, Penang lawyer, Malacca, Sek, Rajah, root rattan, Bakow (a palm), jungle (a palm), ebony, zephyr, churchi, teetree (not tea), and Assyrian thistle.



Wholesaler's View of Co-Operation



Editor's Note

The following communication is from a prominent eastern wholesaler, and contains an exposition of his views on the question of co-operation as advocated in an address delivered before the recent meeting of the Hardwood Manufacturers' Association of the United States, which address was printed in full in the February 10 issue of HARDWOOD RECORD.

A few weeks ago at a lumber association convention a well-known hardwood operator spoke on "The Co-operative Spirit." It was a good talk in general, and some of the facts as presented by this gentlemen were very true and the people at whom they were aimed should take hint and mend their ways.

In the second paragraph of this address, as printed in the February 10 issue of this publication, the writer enumerated a list of ills that are felt by manufacturers in general. The present writer has been at the manufacturing end of the game in past years and can fully appreciate what the "co-operative" spirit would mean if rightly applied to each and every branch of the business. But the trouble is that unless it is adopted at each successive step of the trade-channel and carried out by all, it will be useless to think of it. That is why all co-operative schemes, or nearly all, have failed.

After all, when we have a lot of criticism fired at us, the best thing to do instead of "getting our fur up" is to investigate the matters deeply and see if there is just cause for the kick. At the manufacturing end in past years, before he became a wholesaler, the writer had just as many troubles and was in hot water most of the time, and yet nine-tenths of the claims were just and proper. The wholesalers he found in general were a fair and high-minded lot of business men, with much better and clearer ideas of merchandising and sales than he had, and as a consequence the only just and proper thing to do was to investigate and learn. The writer is not throwing this at the gentleman named above, but is simply citing instances. Some years ago—just to show how some mills handled their accounts—a certain mill took an order and shipped a car to an eastern wholesaler—a man of undisputable reputation. There was trouble on the stock on account of inspection—in fact, it was refused. The wholesaler, however, like most of his class and with a disposition to help out on a car that was badly handled at the shipping end, quickly passed it on to another consumer and with but small deduction to the shipper. The latter, however, went completely up in the air, so to speak—branded the wholesaler as a robber and closed its books against him. Incidentally, the wholesaler, with a view of bettering conditions for this mill, made several suggestions as to the grade and the way it should be put up for that market. If this were done, he said, a large and profitable business for both could be built up. The changes necessary were simply to ship in accordance with the rules. This showed a disposition to work along co-operative lines. Did the mill profit by the other's better ideas of merchandising? It did not. Now let's see what happened further.

The mill sold a similar grade to another wholesaler in that town and the same thing happened, and for a third time the affair was

repeated with still another wholesaler. Then the mill refused to ship anything more to that market and branded the whole crowd with his private unregistered opinion. In each case the fault was with the mill. The grade was poor. The mill refused to acknowledge it and would not even question its inspector. The wholesalers received scathing letters in answer to their criticism. A manufacturer in any other line of business would have immediately investigated at his end and if wrong would have thanked the wholesalers for their criticism and said that the trouble would be at once remedied and that he would hope for still further business. Well, after some years of trouble this manufacturer *was compelled* to remedy his grades. This example is an illustration of only one phase of the business.

The writer of the article referred to states that there are charges that even the organizations are dominated and run solely in the interests of certain big mills. It would not seem to the writer that such a condition exists, although he is not in a position to take one side or the other; but the remark above suggests a thought. It seems that there should be a real school of training maintained by the associations. To go into the thought further it would seem that in such a case there should be a chief deputy inspector for say quartered oak, plain oak and gum; another for birch, beech, maple and ash, and so on, they all to be under the direction of the chief inspector, a man who is unquestionably first in his profession. At least twice a year all the inspectors of the association should be called in to the main office and thoroughly examined and drilled in any changes from the rules in use before. If this were done there would be no cause to complain against the association inspections, and it would be up to every manufacturer to send his inspectors to be trained by the deputies. Excepting from the most critical consumer, you would then have no kicks or refusals based on the grade of your stock. Such a step might also have the effect of effecting a unity of purpose between the two associations, which result we have all been trying to accomplish for some years.

To get back to a further discussion of the co-operative spirit—the gentleman is perfectly right in saying that manufacturers should make their own inspection rules. The wholesalers and consumers should be left out of it. The wholesaler, unless he finances the mill, is in reality but a factor of distribution. His suggestions, however, if practicable, should be taken in account. The consumer should be entirely left out of the making of rules for the manufacturers. Some grade that is standard will fit his requirements, just as the gentleman suggests. When there is a real standard of inspection rules there will be less of a deviation of prices for all grades—provided the widths, lengths and dryness as well as texture is the same or nearly so. This would redound

to the benefit of all the mills. It should further work to the interest of the wholesalers in general. A mill that maintains a sales force must get from two to three dollars a thousand more for its stock than a mill that sells through a wholesaler. The wholesalers can then sell at the same price as the mill first mentioned and yet prices all around will be the same—in fact, in the first case the mill can quote the wholesaler the lower price and do a greater volume of business.

The gentleman speaks of grade-stuffing. He is right. There is nothing the legitimate wholesaler has a harder fight against than this evil; but there is another thing (and it should be called an evil) which is detrimental to good business and is against good merchandising policy, namely, the practice of putting up especially fine grades to sell at the same price as the bulk of manufacturers charge for the standard or so-called standard grades. The writer has in mind one West Virginia manufacturer who puts up a grade of number one common that contains about a third of ones and twos. Yet he sells it at a price sometimes less than the market, but mostly at the price of the market. Is it good merchandising to give away cold, hard-earned dollars? The writer wouldn't say a word if this manufacturer asked a price equal to the value of the stock, but this is rank injustice to other manufacturers of a like grade and kind, as well as a big loss to himself. The writer puts up a grade of red gum that is at least five per cent better than that usually shipped, but he gets a proportionately higher price than the market for the stock. That is, in the strictest sense, good merchandising and, in fact, the only right policy. It seems to the writer that here is a field for co-operation, and perhaps some education administered to these manufacturers would put into practice some of the ideas that co-operation suggests.

The gentleman hit the nail squarely on the head when he said that costs are receiving too little attention, especially the selling costs. Traveling expenses are always going up, owing to the ever-increasing cost of living. For the latter reason our office help expect more; all salaries are higher, in fact. This must be taken into account in sales-costs and most figures should be revised constantly so that an absolute basis is assured.

Considering another question, the "frivolous complaints" as to shortage and grade should be carefully investigated. The writer's concern adopts the following policy in all cases wherein either of the above instances the dispute is small. We compare the two tallies and if the difference is something like 300 feet, we enclose both tallies with a letter saying, "We do not claim that our inspectors are infallible

and there is always a chance for an error. At the same time there is the same chance on the part of your man. For this small difference it would cost us considerably more to investigate or send an inspector than the worth of the disputed stock. Now, you are fair-minded—don't you think the proper thing to do is to divide it up, each standing half?" Or in the case of a few hundred feet off grade the same strain could be applied—possibly mentioning the fact that (in the case of a shipment of No. 1 common) there might be a corresponding amount of higher grade in the car that had simply been counted and inspected as the grade sold. In nearly every case we find that these small matters can be so adjusted. Of course, in the case of any particular customer, if these matters happened repeatedly, we would most assuredly make a thorough investigation, and if right make the customer see the point.

There are always ways of handling similar matters to advantage—a little thought and experience in close personal contact will soon tell you how to do it. You can never really get away from these small matters and it simply resolves itself into a matter of tactful handling.

Near the end of the talk referred to the gentleman says, "The more direct and intimate the contact between the producer and the consumer, the less there will be of sales costs in proportion." The writer begs to differ in that statement, and he does not look at it from the viewpoint of the lumber business alone. He has closely studied the methods of the largest concerns in other lines—those of national reputation—as well as to talk with their sales managers and cost experts. They are all agreed that the wholesalers are the factors of economic distribution. Nearly every article you can think of is handled through wholesalers, even though it is advertised by the manufacturer himself, and if space permitted the writer could show absolute proof of these statements.

Do you know that nearly every line of business has been through the mill-to-consumer idea and had to give it up because it is not equipped to do it? The men in general at the manufacturing end are not the right type of merchants; they may be efficient in manufacturing, but they hardly know the first principles of merchandising. The manufacturer-to-wholesaler-to-consumer trade channel is the only and proper one—first, because it makes each a specialist, and, second, because it is the most economic. The manufacturer spends his entire time reducing his costs and perfecting his manufacture—he has no sales worries. The wholesaler is then a sales specialist and has no manufacturing worries. Costs in both cases are lower. It has been proved so many times that it is hardly necessary to go into it again.



Traffic Matters Around Memphis



The railroads, as forecasted in the last issue of *HARDWOOD RECORD*, have voluntarily withdrawn the increased tariffs, affecting shipments of lumber and lumber products from milling points in the South to Canadian destinations, amounting to from two to six cents per hundred pounds. This advance was strenuously opposed by the Southern Hardwood Traffic Bureau, representing hardwood lumber interests of this city and section. Hardwood lumber interests from other southern centers also appeared at Cincinnati and St. Louis to give testimony calculated to bring about an order from the commission countermanding the advance. The railroad officials evidently came to the conclusion that the time was inopportune or that the lumbermen had made out entirely too strong a case against them. They have therefore voluntarily withdrawn the advance and have thus taken the matter out of the hands of the commission which had it under advisement. It was suggested a few days ago that the Southern Hardwood Traffic Bureau might insist upon a ruling from the commission in connection with the case, but it is now said that the action of the railroads ends the controversy.

Announcement has also been made that the western lines have cancelled the proposed increase in tariffs from points in Louisiana and Arkansas to Ohio and Mississippi river crossings. The ad-

vance was to have been about two cents per hundred pounds. A short time ago the western lines withdrew the proposed increases from points in the West to destinations in Kansas and Nebraska. This is only another way of saying that the railroads have voluntarily withdrawn increased tariffs in three distinct cases. In not a single instance have they been successful in getting an advance approved by the commission.

The withdrawal of the advance on the part of the western lines has resulted in a change in the schedule of the Interstate Commerce Commission. A hearing was to have been held at St. Louis, covering the proposed advance which has been withdrawn, but this has been changed from St. Louis to Memphis. The hearing at this point will be for the purpose of taking testimony in connection with the proposed increase in rates from Memphis and Mississippi points to New Orleans and it will be well attended by the officials of the Southern Hardwood Traffic Bureau and other prominent lumbermen of this city and section.

George D. Burgess, president, J. R. Walker, attorney, F. B. Robertson and other officials and members of the Southern Hardwood Traffic Bureau have just returned from New Orleans, where they went to attend the hearing before the Interstate Commerce Commission in connection with the through bill of lading contro-

versy. The Southern Hardwood Traffic Bureau had charge of the case of the Anderson-Tully Company, through which it was sought to secure an order from the commission compelling the railroads to issue through bills. Mr. Burgess said on his return to Memphis that the west side lines had already begun issuing through bills and that an agreement had been reached between these lines and the steamship companies providing that exports on through bills were to be exempt from demurrage and that deliveries from railroads to ship side were not to be delayed beyond a period of eleven days. Members of the export trade of New Orleans very vigorously attacked this agreement as between the steamship companies and the west side lines on the alleged

ground that it marked discrimination as between those who handle their exports into New Orleans on local bills and those who handle their export shipments on through bills. Mr. Burgess, however, believes that the agreement which has been effected between the steamship companies and the railroads will not be interfered with by the commission and that the outlook is very bright for a permanent victory in this controversy. Exporters here are very much pleased with the result of the agreement between the steamship companies and the railroads because they are of the opinion that it will make it possible to handle export shipments of lumber on a very much more satisfactory basis than during the past year and a half.



Ebonies of Commerce



Ebony is the trade name of a wood that is exceedingly hard, heavy and susceptible of a high polish. The true ebonies are obtained from several species of *Diospyros*, and are so deep black as to be used to personify blackness. The best known ebony is the calamander, or coromandel wood (*Diospyros quercita*) of Ceylon, and is much esteemed for ornamental cabinet work. It is a scarce and beautiful wood, exceedingly hard, fine, close-grained and heavy. This wood has a pale reddish or dark brown color, and is crossed by large pith rays, or isolated elongated patches of a deep rich brown color, passing into black. The luster is silky where the pith rays are small, but higher and more varying where the rays are larger and the grain coarser. Calamander wood is considered by many persons the handsomest and one of the most valuable of all the dark woods; the root has the most beautiful appearance. This wood is now getting scarce and the old carved ebony furniture from Ceylon is much admired and often sells for fabulous prices.

Belonging to the same genus as the calamander is the ebony of commerce (*Diospyros ebenum*), which, on account of its color and denseness, is so much used by turners, and for inlaying work by cabinet makers. This tree yields the best kind of ebony wood, but it varies in quality as it grows from sea level to the elevation of 5,000 feet in Ceylon. A number of other species of *Diospyros* are known to yield in great abundance the black ebony of commerce. Those of the East Indies are *Diospyros chloroxylon*, *D. cordifolia*, *D. mabola*, *D. melanoxylin*, *D. roylei*, and *D. tomentosa*. The ebony from the west coast of Africa is usually the most perfect black, that from Mauritius and Ceylon being variegated more or less with cream brown. *Diospyros cordifolia* yields a wood that is a dark brown, strong, durable, and is difficult to work. Ebony of a very superior quality is procurable in the western districts of the Madras presidency, as well as the northern Circars. Sixteen-inch planks of a fine uniform black have been obtained chiefly from Coorg and Canara. Smaller pieces are procured from Cuddapa, Salem, Nuggur, etc., but there is no steady demand, though it is a peculiarly fine timber for cabinet work, and some of it is well veined for ornamental purposes. Ebony may be obtained in Siam, but the quality is said to be not very good; small quantities are exported from there every year to China.

There are a number of entirely unrelated woods from widely separated parts of the world which pass under the general name of ebony. In addition to the 130 or more species of the genus *Diospyros*, which yield the hard, black woods, the genera *Brya*, *Dalbergia*, and *Maba* produce different kinds of ebony. The green ebony supposed to be furnished by *Brya ebenus* is obtained from Jamaica and other parts of the West Indies. The heartwood of this tree is dark green, and the sapwood is almost white. The wood is hard and susceptible of a very high polish. It is much used for rulers and other small work, also in parquetry. Another green ebony is said to be obtained from *Jacaranda mimosifolia* in Brazil. The name green ebony is also applied to the wood of *Excoecaria glandulosa* of Jamaica. Several species of *Dalbergia* yield what is known as blackwood or rosewood. One African species, *Dalbergia melanoxylin*, is used very extensively, and practically all so-called ebony from Africa is from this tree. It is found both in

East and West Africa. The ebony from Madagascar is doubtless of this species. Another tree which yields ebony is the ironwood (*Maba burxifolia*) of Ceylon. This is only a small tree, but its wood is valuable, being exceedingly hard and durable.

The bulk of the ebony used in Europe comes to Hamburg and Havre, which are very important centers for the ebony trade; the dealings in Havre are more considerable, perhaps, than those at Hamburg. The trade is largely supplied with wood from Madagascar, West Africa, Ceylon, Bombay and Macassar, and the importation in 1911 was as follows:

Madagascar	347.6 tons
West Africa	1,432.4 "
Ceylon and Bombay	53.4 "
Macassar	983.9 "

The prices of the West African kind ranked from \$1.10 to \$2.10 per 100 pounds; of Madagascar ebony from \$1.75 to \$3.90 per 100 pounds; and of Macassar ebony from \$1.50 to \$1.95 per 100 pounds.

The importation of ebony into the United States for the last five years was as follows:

Year	Value
1907.....	\$79,222
1908.....	98,832
1909.....	80,805
1910.....	92,777
1911.....	74,002

Metal Not Strong Enough in This Case

The contest between wood and metal goes on. It has been taken for granted by some persons that metal can be substituted for wood in most positions, and that the only thing to consider is cost. Experiments are showing the fallacy of this belief. There are many places where metal is an unsatisfactory substitute for wood, leaving out of consideration all regard for comparative cost. The plow beam is one such place. Formerly all were of wood, and by almost unanimous consent oak was used. Then iron and steel began to appear as substitutes, and for a time it seemed to be taken for granted that they were better, but trials in crucial tests failed to show it.

In a slow, steady pull where the ground is soft and free from obstructions, there may be little difference in service of a metal and of a wooden plow beam; but other conditions must be met. Rocks are struck and roots and stumps encountered, and it is in such cases that the wood beam proves its superiority. A cast iron beam is liable to snap short off if the plow strikes an unyielding object, while the steel beam under such circumstances is liable to bend and buckle and is thrown permanently out of shape. It is next to impossible, or at any rate it is expensive, to straighten a plow beam after it has been bent.

The elasticity of wooden beams permits them to yield under sudden strain and shock, and recover their original form almost instantly. Permanent distortion is so rare that it is practically unknown. A plow beam of wood may break but it rarely does so, and breaking is about the only mishap that can put it out of use. The lightness of wood is also of advantage.



One Source of Flagrant Waste



It is a well-known fact that the supply of good white oak is becoming decidedly restricted. This is reflected in the constant increase in prices. A prominent member of the Tight Barrel Stave Manufacturers' Association recently stated that "standing timber



WASTE IN CUTTING WHITE OAK STAVES, ARKANSAS.

has advanced at least fifty per cent in price within the last year, and when you find a virgin tract the advance is more than one hundred per cent. * * * In addition to this we are compelled to go back fifteen or twenty miles from the railroad, and in some cases more, to get suitable timber for making staves, whereas a few years ago timber could be had eight or ten miles from shipping point, which makes our haul bill from fifty to seventy-five per cent more. * * * Several years ago it was a common occurrence to work a tract of timber and get from fifty to sixty per cent prime staves. I venture to say at present the average of prime stock produced does not exceed twenty-five per cent."

With this decrease in the supply of available timber the necessity of better utilization becomes apparent if the industry is to be supplied. While the consumer may dislike the idea of paying higher prices for his supplies, nevertheless such increases are inevitable and are the natural outcome of the law of supply and demand. Everyone regrets to have timber wasted in any manner but not everyone is willing to pay the price which will make complete utilization possible. Not until the scarcity of timber reflected in high prices makes it absolutely necessary for every concern which operates to utilize completely all merchantable material, will lumbermen practice strict economy of the forest resources of their timberlands. The statement is proved by conditions in European countries today. Utilization is complete in those countries where prices are high, but where prices are low, as is the case in northern Norway, utilization is no closer than it is in the United States.

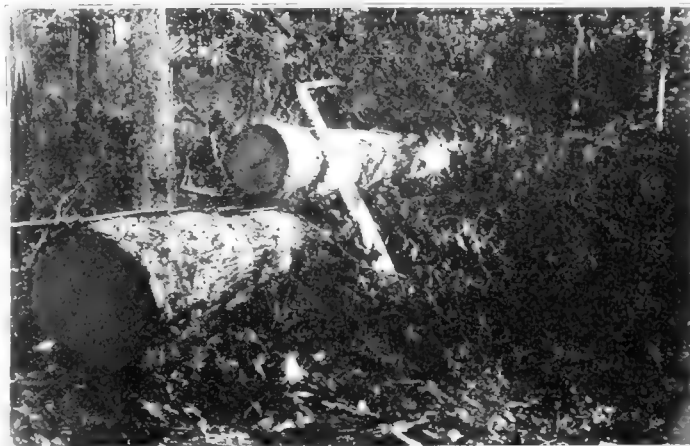
The amount of timber that has been left in the woods to rot because it would not pay to take it out is enormous. Most of this, however, was necessary waste. To have saved it would have involved a still greater loss in energy and capital. It has been, and still is to some extent, a common failing of many well-meaning but misinformed enthusiasts to denounce the lumberman for destroying the forest. Such persons do not realize that enormous waste would result if

standing timber is left a standstill, for while individual trees are growing all the while, others are dying off just as fast. It is only by removal of some of the timber that growth of the remainder is possible. Before the advent of the lumberman the trees died from natural causes or were blown down or were killed by fire. The forests as a whole were rarely destroyed but only certain of the trees composing it. The lumberman has hastened the process of the removal of old timber and while his methods were wasteful they are usually less so than those of nature.

It is not sufficient that the owner of timber should be opposed to all waste, for if his lands are poorly situated as to market or topography or transportation facilities waste will result whether he lets his timber stand or cuts it. Good intentions alone will not prevent waste. No owner could be more anxious to secure complete utilization of every forest product than is the United States Forest Service and yet some of its timber sale areas reveal little if any better conditions than are to be found on neighboring private lands. There is usually this difference, however, that the government tries to leave the forest in the best possible condition for subsequent growth of timber. Until the price of timber exceeds the cost of growing, it is going to be difficult to get many private owners interested in forestry. That time is rapidly approaching, for our

virgin supply of timber is becoming decidedly restricted and as we must depend almost wholly on our own forest resources for the future supply it is very evident that timber values are bound to increase sufficiently to cover the cost of production. Nothing seems more certain.

The wastes referred to above have for the most part been unavoidable. There are other kinds of waste which can be avoided and that they are allowed to exist is an evidence of extravagance, inefficiency or carelessness. The stave manufacturer quoted above states further: "I do not think there is any line of business handled as carelessly as the



WHITE OAK WASTED IN THE MANUFACTURE OF SPLIT STAVES, IN THE OZARKS.



WASTE IN CUTTING WHITE OAK STAVES, ARKANSAS.

stave and cooperage business. We are very careful in selecting a tract of timber, and after agreeing on the price, we pay our good money for this timber. We then turn the valuable tract of timber over to a man or a crew of men to have it worked into staves and

bolts, and in nine cases out of ten, this is the last the purchaser ever sees of this timber, until it is delivered in his yard, either in staves or bolts. And what a pitiful sight to behold: bolts made of every conceivable shape; staves sawn too light, too short; thin edges and no proof on staves—this is what he actually sees. He does not know what has happened in the woods. He has not had time to go and see. He must buy another tract of timber and keep his mills running."

Here then is evidence of unnecessary waste. In dealing with a wood like white oak fit for staves there should be no excuse for bungling. Surely the wood has become scarce enough and the price high enough to put a premium on good workmanship. And how about the work in the woods? Perhaps if the purchaser of the timber would spend a little more time on the ground where his bolts or staves were being cut he could improve his material and effect sufficient economy to make it unnecessary to hustle after new tracts so strenuously.

One of the most promising methods of securing complete utilization is through a proper combination of different kinds of wood-using plants. Operators engaged in the manufacture of special products, such as cooperage stock, wagon material, handle wood, etc., take out only such material as is suitable for their individual uses and leave the unused portions of the trees to waste on the ground. Often not to exceed one-half of the merchantable material in the tree has been utilized. Other timber is injured by the felling of the particular trees desired. Stumps frequently are as high as three feet, or twice what is necessary.

The argument of the small specialty man is that in his locality only certain choice products can be taken at a profit. He contends that there is no demand for lower grade materials. The fact in the case is that it is not so much because there is no market for the other material as it is that the operator is not equipped to supply it. The small specialty men have little portable mills and operate as jobbers for the manufacturers who handle their products. These concerns afford financial backing and either give the jobber a contract to remove timber from company lands or assist him in securing stumpage here and there from settlers. The price he is to receive is fixed by the company and often he is under such financial obligations that independent action is prevented. He gets out only such material as the company desires and as this is usually limited to one or two choice products, excessive waste of merchantable timber results.

For instance one large cooperage concern in the Ozarks has about twenty-five small millmen jobbing for it for stave bolts alone. There is food for thought in the fact that the company does not let these jobbers work on its own lands but gives them contracts to cut outside stumpage it has secured. Comparison of the cutting areas left by the jobbers with those of the company's own men reveals the extent of the unnecessary waste. In the former case only half the commercial material in the tree has been taken, the remainder left in high stumps, top logs and somewhat defective portions which would not make prime staves but were capable of supplying material for other purposes.

This particular cooperage company logs its own timber and transports the logs from the cutting area to the mill by rail. There every log is converted into the particular products for which it is best suited. While cooperage is the principal product, the company finds it highly profitable to secure thorough utilization of its timber by producing lumber, ties, construction stock, hubs, felloes, chair and

furniture squares, insulator pins, etc., from material which is not suitable for cooperage.

This ability to secure complete utilization is not confined to the large mill. Small portable mills can be equipped at reasonable cost for working up all sorts of material. Instead of cutting the bolts all over the woods the logs are hauled to mill and such as will produce staves are so utilized without waste. If there is handle stock it can be separated, and so on for many things from the choicest to the most common. The man who says there is no market for the by-products is more often than not speaking without knowledge of actual conditions. The demand usually exists or can be created but it requires some business ability to take advantage of it.

Following are some examples of the grades and specifications of rough stock and squares for factory use in making special hardwood products:

Wagon axles: Squares from 23½" to 6" x 7" and 6 feet long.

Wagon bolsters: Squares from 3" x 4" to 4" x 6" and from 4' 1" to 4' 6" long.

Wagon reaches: Squares from 2" x 4" to 2½" x 5" and from 8' 10" to 14' long.

Wagon poles: Squares from 2½" x 4" tops and 4" x 4" butts to 3½" x 3½" tops and 3½" x 5" butts and 12 feet long.

Wagon eveners: Squares from 2" x 4" to 2½" x 5" and from 4' 2" to 4' 6".

Singletrees: Squares for turning, 2½" x 3" x 36".

Neckyokes: Squares for turning, 4" x 4" and from 44" to 48" long.

Wagon felloes: Squares for sawing, short clear cuttings 10" to 14" wide and from 24" to 30" long.

Hub stock: Blocks in the round for turning, from 9½" to 12" in diameter inside bark and from 12" to 15½" long.

Spokes: Squares for turning, 2" x 2½" x 30".

Implement stock: Factory stock, board and planks for cutting, to grade No. 1 common and better.

Handle stock: Bolts 40" long, split or in the round.

In addition there is usually a market for railroad ties, fence posts, piling, poles and occasionally for cordwood. That it pays to manufacture diversified products rather than a specialty alone is proved by the fact that it is being done and in places, too, where the single specialty man says it can't be done. It means getting out of the old rut and that for some is impossible; it also means getting a price for the special stock commensurate with its intrinsic value.

Woods for Shuttles

A recent consular report from Bradford, England, gives figures on dogwood and persimmon used in that country for shuttles. These woods are cut wholly in the United States. England dogwood is known as cornel. The shuttle manufacturers purchase their supplies of wood from wholesale merchants at Liverpool, either in the form of logs or, more generally, in blocks, packed in bags, cut to sizes ready for working up. The dogwood logs vary from 4½ to 6 inches in diameter and 4 feet 4 inches to 6 feet in length; the persimmon logs vary from 6 to 20 inches in diameter and 6 to 10 feet in length. These are sold by the ton (2,240 pounds) at prices that range from \$15.82 to \$19.47, depending on quality and the state of the market.

The dogwood blocks cut to sizes are said to be selling at the following prices: Width, 1½—1¾ inches; depth, 1¾ inches; length, 12—13 inches; price, \$6.57 to \$9.73. There are said to be three qualities.

One firm states that \$19.47 is the highest price it has hitherto paid for persimmon blocks. Quotations follow: 2 by 1½ by 14 inches, \$6.08 to \$7.30; 2½ by 2 by 18 inches, \$17.52. A ton is equal to about half a cord.

Some of the English shuttle makers use African boxwood. Formerly most shuttles were made of Turkish boxwood, which is now too expensive for that use.



CHAIR AND WAGON STOCK SAWN FROM SLABS AND CULLS.
LESLIE, ARK.



Circassian Walnut



The Forest Service has published circular 212 on Circassian walnut (*Juglans regia*). It was prepared by George B. Sudworth and Clayton D. Mell, and is replete with information for those who buy, sell, or use this wood. Many persons have experienced difficulty in their attempt to secure statistics on the quantity used, the sources of supply, and the cost of placing it on the market. Several other matters concerning this interesting wood have been little understood, and confusion and misunderstanding have resulted. The circular just issued will clear up many of these points, and will prove interesting to the general public.

One thing which will surprise most people is that Circassian walnut now grows entirely round the world in the north temperate zone, following the region of mild climate from northern China across Asia, Europe, and the United States, to California. In most parts of this belt which encircles the globe it is a planted tree. It is not known just how large its original range was; but apparently it included the region near the southern shore of the Caspian and Black seas, and it is not improbable that it spread from that country both east and west by means of planting. It reached Europe a long time before the Christian era, and it now grows in most of the southern and western countries of that continent. The different names by which the tree is known include English walnut, French walnut, Italian walnut, and Austrian walnut. It is the tree which produces the English walnuts and the Manchurian walnuts of commerce. It has been extensively planted in California and grows well in the southern states, bearing nuts abundantly as far north as Washington, D. C.

It is the wood and not the nuts that interests lumbermen. Planted trees have never developed wood with the beautiful figure obtained from that which grows wild on the rugged mountains south of the Caspian and Black seas. Some excellent material comes from the region northwest of the Himalaya mountains in India where it is not improbable the tree grows naturally. At any rate, specimens nine feet in diameter and over one hundred feet high have been reported in that region, and pure forests of considerable extent occur. That timber is now a long distance from market.

Circassian walnut is bought by the pound at shipping ports. The weighing is done while the logs are in the rough, with the bark on, and of course the sapwood is weighed also, though it is useless to the purchaser. The sap is from four to six inches thick, and the purchaser of the logs removes it and ships the heart only. He thus leaves behind as useless about half the wood he buys at four cents a pound equivalent to about \$200 a thousand feet board measure. It can be readily understood that the chips in a Circassian walnut shipping yard constitute a very costly waste heap.

After the purchaser has bought the logs and prepared them for shipment, he must pay—if in Russia—an export duty of \$20 a ton to the government. Next comes the freight charges on the long haul to market. If the wood is for the United States where most of it finds market, it must be shipped from 6,000 to 9,000 miles before it reaches the factory where it is converted into veneer or other products. It is believed that about 2,500,000 feet, log measure, of Circassian walnut reaches the United States yearly.

The cost of cutting the logs and delivering them at the seaports or other points of shipment is high. They are hauled long distances over poor roads. The green wood is too heavy to float, and log drives of this walnut are unknown. So excessive is the labor which is necessary in transporting the timber from the mountain fastnesses to shipping points, that those who sell the logs at the high price of four cents a pound make little more than living wages.

No other timber tree has been exploited more than Circassian walnut, and the demand for it has always been greater than the available supply. Much of the Circassian walnut now used in various parts of the world comes from the shores of the Black sea, and from other regions as far as Persia. The greatest outlet of southern Russia is probably from Odessa. None of the wood grown in western Europe is shipped to this country. That grown in England is

not equal in quality to the wood from the Caucasus, though it is much sought after for furniture, and particularly for gunstocks. In fact, the demand for these purposes in western Europe is so great that the domestic supply invariably fails to meet it, and at times there has been great dearth of the wood there. Realizing the importance of a home supply, France passed an act in 1730 prohibiting the exportation of Circassian walnut. The shortage of supply in Europe has been due chiefly to the enormous demand for gunstocks in times of war. The wood of approximately 12,000 trees was required early in the nineteenth century for this purpose alone. In consequence, large numbers of plantations were established throughout England, France, and Germany. Some of these were very extensive; one founded in 1818 near Boulogne, France, contained about 30,000 trees.

Widespread consumption of Circassian walnut for gunstocks and furniture continued in Europe until its cost became very high and importation began from the Orient. Liverpool and London were then, and still are, the chief ports of entry from which Circassian walnut is reshipped to continental Europe and to some extent to the United States.

Profit from growing Circassian walnut in Europe for timber is much less than it once was, both because large quantities (about 20,000,000 feet) of our native black walnut are annually shipped there, and because the wood is now coming from the East.

Dry Circassian walnut weighs about forty-five pounds per cubic foot, is hard, compact, easy to work and split, moderately tough, and durable in contact with the soil. It shrinks very little in seasoning and does not crack or warp. The heartwood is dark chocolate brown, often shading from light brown to black. Burled and other highly figured forms of the wood take a beautiful finish. Radial (edge-grain) and tangential (bastard) cut boards are always lighter in tone than transverse sections. In light-colored sticks the annual rings of growth are clearly but not strikingly defined, but in dark specimens are very indistinct. The pores are irregularly scattered.

The wood of trees grown in poor upland and hilly soils has a beautiful fine grain and texture, while the wood grown in rich lowland soils is much coarser and less beautifully marked. The best qualities of timber are obtained from vigorous sound trees over one hundred years old, which rarely have a clear length of more than twelve feet. The most beautifully veined wood is in the roots and burls, the latter being particularly common on trees near the Black sea. The grain in such growths is so interwoven and twisted as to produce the most curious and irregular figures, giving the wood an unequalled value for veneer. A single tree of fine figure sometimes sells for several thousand dollars. Expert agents who are employed by large dealers in this wood are constantly in the principal markets on the lookout for exceptionally fine logs, and when one is discovered it is purchased without much regard for the price asked for it.

Various woods are sold as substitutes or imitations of Circassian walnut. Although it is usually easy for expert buyers to recognize true Circassian walnut in the logs, it is often difficult to distinguish the wood from some of its substitutes when these have been skillfully stained and finished. There are many good African, Asian, and South American woods which are similar in structural qualities to Circassian walnut, though none possesses the magnificent figure, delicate tones, and velvety texture of the walnut. Chief among the woods which resemble Circassian walnut in general appearance is the so-called satin walnut, tassel wood, hazel pine, or red gum (*Liquidambar styraciflua*) of the United States, the wood of which has been sold as Circassian walnut both for furniture and for interior finish. The wood from butt logs of red gum is often handsomely veined and mottled, and is strikingly similar in general appearance to Circassian walnut. Butternut is so similar in color and grain to Circassian walnut that it could be substituted for the less handsomely figured wood of the latter. The light and dark browns, and the black veining of the Oriental wood, however, readily distinguish it from the solid brown shade of butternut.



NELSON H. WALCOTT, PROVIDENCE, R. I.,
PRESIDENT.



GORDON C. EDWARDS, OTTAWA, ONT., CAN.,
FIRST VICE-PRESIDENT.



W. W. KNIGHT, INDIANAPOLIS, IND.,
SECOND VICE-PRESIDENT.



Annual National Wholesalers



That sterling and foremost lumber organization, the National Wholesale Lumber Dealers' Association, held its twenty-first annual meeting at the Hotel Chelsea, Atlantic City, on Thursday and Friday, March 6 and 7.

There was only a moderate attendance at the first session, but this gradually grew as the various meetings progressed, until at the final meeting, on Friday afternoon, there was the usual representative gathering. This meeting, of course, was made up largely of eastern manufacturers and wholesalers, but there was a considerable sprinkling present of allies of the organization from the South and Middle West.

The address of welcome was made by the Hon. William Riddle, mayor of Atlantic City, who addressed the meeting on the subject of "Commission Government," in which he ably contrasted the advantages of this municipal government with that of the old council and department system.

N. H. Walcott of Providence on behalf of the association made a suitable response to the mayor's address.

On motion, the reading of the minutes of the last meeting and the roster of members was omitted.

President Parker delivered his annual address as follows:

Address of President

The National Wholesale Lumber Dealers' Association, now assembled in its twenty-first annual meeting, has had an honorable career. Founded in New York City in 1894 by a handful of eastern and Michigan lumbermen, it has continued to grow and prosper until its membership now numbers over four hundred, distributed among thirty states and Canada, and its influence is widespread in the whole range of the lumber trade from manufacturer to retailer.

It was in a spirit of bettering the conditions existing in the lumber trade that the fifteen men met and incorporated under the name now recognized as one of the leading trade associations of this country. Consider the object of the association as defined in its charter—"To protect members against unbusinesslike methods in the wholesale and retail lumber trade; to foster such trade and commerce; to reform abuses in such trade or business; and to secure freedom from unjust or unlawful exactions; to diffuse accurate information among its members as to the standing of merchants and others by and with whom such trade or business is conducted; to produce uniformity and certainty in the customs and usages of said trade and of those engaged therein; to settle differences between its members, and to promote a larger and more friendly intercourse between them." I submit that the National Wholesale Lumber Dealers' Association has fully lived up to its purposes as defined in its charter, and is entitled to the support of every wholesale lumberman.

The past year has been an active one in most departments of association work, and I believe the organization machinery was never in

better shape to produce results for our members than at the present time. The good judgment and painstaking efforts of our efficient secretary, aided by his able corps of assistants, has brought the organization to a high degree of efficiency which has been reflected by the unusual harmonious relations which have existed between this association and all branches of the lumber trade during the past year; and in the many matters which have been presented and passed upon, this association has displayed a spirit of fairness and good judgment which has given it a high standing with other associations and individuals with whom it has come in contact. Our relations with the several lumber manufacturing and retail associations were never more harmonious, and much good has resulted to the lumber trade from the combined efforts of our association acting with other lumber trade associations to correct abuses in several matters affecting the lumber trade.

Our retail friends have felt, I believe, that they have had our support in their efforts to keep the lumber business in proper channels, as all lumbermen recognize that any change in policy which would disturb the relations between manufacturer, wholesaler, retailer and consumer would bring about chaotic conditions which could not but affect seriously all branches of the lumber business, and bring a detriment to all and a benefit to none.

The first and most important work of the association has always been and is now, in my opinion, the work covered by the bureau of information and legal department, and while I will leave to the chairman of the bureau and the manager of the legal department to give a detailed report of the work which this department is doing for our members, I feel it is my privilege to point out to all of our members the great value of these departments.

The bureau of information, or credit department, is splendidly equipped to give accurate information regarding the financial standing and business methods of wholesale and retail lumber buyers, such as can be obtained from no other source. Over thirty-two thousand lumber buyers are rated by this department, and up-to-date reports can be promptly obtained upon request by mail or telegraph, giving the financial responsibility, moral business risk and business methods of any of these buyers. No mercantile agency can furnish the valuable information that the bureau is able to give, and no member can afford to be without these reports.

I wish to compliment the chairman of the bureau of information and its department manager, for having brought the bureau up to a still higher grade of efficiency this year by their careful and painstaking work; and if the association had no other asset than its bureau of information, this alone would remain a monument to the usefulness and good results of our association work. Having served for several years myself as chairman of the bureau of information, and having been instrumental in the starting of the legal department, and knowing what these departments are doing for our members and the lumber trade as a whole, you will pardon me if I indulge in a superlative when calling to your attention the splendid work being done and the results accomplished by these departments.

Our chairman advises that he is at present getting up a blue book of good words from our members who are using the bureau, and I earnestly



E. F. PERRY, NEW YORK, N. Y.,
SECRETARY.



F. R. BABCOCK, PITTSBURGH, PA.,
TRUSTEE.



R. M. CARRIER, SARDIS, MISS.
TRUSTEE.

ask any of our members who are not members of the bureau to secure a copy of this blue book and give its contents careful consideration.

The legal department in connection with the bureau of information had made rapid strides since it was established in 1904. The important work of the legal department is the collection of claims, and I submit to you figures from its records, showing a steady growth. Claims to the amount of \$1,434,727.00 were placed with the department from Jan. 1, 1905, to Dec. 31, 1911, and of this amount \$1,217,344.00 were settled, and I venture the statement that this is a much larger percentage of claims settled, and at a much lower cost than can be shown by any commercial agency. I ask the heartiest support from all our members to the bureau of information and legal department. They alone are worth many times the expense of both association and bureau dues, and their usefulness merits a continued growth and increased patronage.

The railroad and transportation committee, through its bureau, has done good work for our members during the past year. Information and assistance covering a wide range of transportation matters has been furnished members, and many claims for loss and damage in transit, overcharge in weight, rate, misrouting, etc., have been handled, for which a nominal charge has been made based on the actual amount collected. Many of our members fail to appreciate the effective work done by the railroad and transportation bureau. In obtaining free allowance in weight for stakes used on flat and gondola cars, this association, through its railroad and transportation bureau, has benefited the whole lumber trade in saving it many thousands of dollars; and the bureau is in a position to compel the railroads not now making this allowance to do so. I ask your careful attention to the detailed report of the chairman and traffic manager of the railroad and transportation bureau, noting especially its efforts in connection with the National Lumber Manufacturers' Association to obtain a correction of the abuses in the weighing of shipments of lumber.

The legislation committee has had but few important matters submitted during the past year, but this committee is always on the alert to look after the interests of the lumber trade in protecting it from unjust and burdensome legislation which is continually cropping out in national and state legislatures; and our members are urged to report to this committee any proposed laws affecting unfavorably the lumber trade.

The marine and coastwise insurance committee, working in the interests of members using water transportation, has been little called on during the past year, but I venture the hope that during some coming year plans for an interinsurance arrangement such as is being successfully and profitably carried on in several local associations may be attempted by the marine and coastwise insurance committee, thus guarding the interests of our members from excessive rates from the marine insurance companies.

The fire insurance committee, under the able chairmanship of Geo. H. Holt, has been active during the past year in protecting the interests of our members in securing lower insurance rates than offered by the board companies. Great credit is due to Mr. Holt and this committee for the campaign of education that has been started among our members; and material results are already appearing in the more liberal treatment of the lumber insuring interests by the insurance companies. Mr. Holt has some broad-gauged ideas on insurance matters, which will be presented at this meeting, and I ask your careful attention to his report and suggestions.

This committee, in connection with the special committee on single standard universal hardwood inspection, has been acting under a resolution adopted at a former annual convention, with a view of using its good offices to obtain a national set of rules governing the grading and inspection of hardwood lumber; and while their efforts have not yet met

with full success in bringing about the desired situation, some good has resulted, and very cordial relations have been established between our association and the hardwood lumber associations.

To settle business differences between our members is the work of this committee, and I am pleased to report that the arbitration committee advises that business between our members during the past year has been conducted with such "smoothness and harmony" that it has been unnecessary to call for the services of the committee frequently. The committee was called upon to arbitrate one case, which was promptly decided. Several minor cases were submitted to our secretary and were settled on his suggestion without aid of the arbitration committee. This committee offers another source of saving of time and expense to those who accept its good offices, by settling disputes between members at actual cost of the expense of the committee, and a saving of your own time and the annoyance of courts and juries.

We are much indebted to this committee and its efficient chairman for its excellent work during the past year. The forestry question has been growing in the public mind and is now one of the active questions of the day. The people of this country, with its tremendous resources of timber, must be educated to take all precautions to avoid a future timber famine, by advocating such legislation as will tend to preserve the forests from needless waste and destruction, and by advocating a proper and scientific plan of reforestation which will preserve the forests for those who will come after us. Our committee on forestry strongly advocates a liberal governmental appropriation for the protection of the national forests, and a rigorous protest against turning over the national forests to the states in which they are located, and asks the active co-operation of our membership in aiding it in these reforms.

This important committee, under its able chairman, F. S. Underhill, has been endeavoring to bring about a better condition of affairs in the interest of the wholesaler on the subject of terms of sale, realizing that it is the wholesaler rather than the manufacturer who suffers from violations of discount privileges, and believing it is in the province and right of the wholesaler to remedy this evil to a considerable extent by taking a firm but courteous stand with his customers whenever there is a violation of the terms of sale, which are as much a part of the contract as the price. The committee on terms of sale and trade ethics brings in a strong report this year, which merits your most careful attention, and which I hope will result in bringing up for general discussion in the meeting this very important subject.

Several other committees not mentioned above will have interesting reports to submit at this meeting, to which I ask your careful attention and consideration; and I take this opportunity to express my thanks and appreciation to the chairman and members of each of the several committees for the time and thought they have given these association matters during the previous year.

I wish also at this time to welcome the delegates and representatives of the different associations who have gathered here with us, and I hope they will feel free to attend our meetings and to express themselves on any subjects brought up for discussion.

It is my sad duty at this time to call your attention to the recent death of one of our board of trustees, L. R. Vandervoort of North Tonawanda, whose loss we shall all keenly feel; and I shall later have this association, through its board of trustees, pass suitable resolutions of condolence.

Our membership during the past year has suffered some losses on account of business failures and concerns going out of business, but through the efforts of our special membership committee, and the faithful efforts of several members of our board of trustees, we have made an

aggressive campaign and today find our membership approximately the same as a year ago. This question of increasing the membership leads me to call to your attention the need for our association covering a much broader field than formerly, if it is to continue to grow and prosper in the future as in the past. If our association is to be national in character as well as in name it must recognize the changed conditions in the lumber business since the time of its inception. We must recognize that the great lumber interests of the country are now located south of the Mason and Dixon line, and west of the Missouri river, and it is these localities that need our good services as much as our eastern members. The opening of the Panama canal this year will bring the Pacific coast lumbermen into much closer touch with the eastern wholesale lumber trade, and as my worthy predecessor wisely pointed out in his address at Louisville a year ago, it is necessary for us to turn our thought toward the great Pacific coast in order that the great lumber industry in that immense territory may be familiar with the many benefits to be derived by affiliation with us. I re-echo these thoughts to you this year, and ask your careful consideration as to whether it would not be wisdom on our part to consider holding one of our future conventions in that far distant land.

Our executive committee meetings and also our board of trustees meetings during the past year have been well attended, and I desire at this time to personally thank both the executive committee and the board of trustees for the loyal support they have given me, and also the chairman and members of the various committees, who have promptly disposed of what business has been referred to them, in a most satisfactory and businesslike manner.

In laying down my mantle this year I feel under obligations to each and every one of you, and I wish to thank our members and friends who have helped in the arrangements and details of this annual meeting, thus making my burdens lighter than I could have asked.

In conclusion I feel that it is a great honor and a great pleasure to have served as the executive head of this association, and after being closely associated in various capacities with its workings for a period of over fifteen years, I feel that I am putting it none too strongly when I say that the efforts of this association have always been to make the lumber industry better, cleaner and more harmonious, and I believe the whole lumber trade is today better for the work this association has done.

Every member within our ranks appreciates the truth of this statement, but there are many outside of our ranks who, while participating in the indirect benefits this association brings, are not bearing their share of the burden; and I appeal to every loyal member of our association to use his best efforts to bring these outsiders into our body; and if this could be brought about our membership could be easily doubled, and the power of the association for doing good for the lumber trade could be trebled. Is it not worth the effort considering the possibilities of the future from what the association has done in the past?

The annual address of Secretary E. F. Perry then followed.

Secretary's Report

This being the twenty-first annual meeting it may be said that the association is of age, and, if a man, entitled to speak for itself, but being only a corporation its annual report or statement must be made by someone else, and not only to record its past but to make clear the present and grease the ways for the future. My report will not be statistical but will be more a memorandum of the year's work plus some comment on our methods, also a suggestion for the future.

The details of the association work the past year have been very little different from those of years gone before. The general scope and character of the work remains substantially the same even though methods of merchandising and distributing lumber have changed very materially since we first started, twenty odd years ago. The change, however, has been gradual, and we believe we have kept pace with these changes. The work, however, so overlaps each year that it is difficult to find a common starting point.

You have undoubtedly noticed that our committees also are usually partly made up of members who have been prominent workers, and who have by their long connection become proficient in the work of the association, thereby giving their committee work the benefit of an accumulated practical experience. It has often been remarked that we have been fortunate in having such a large portion of our members continue interested each year, thereby enabling us to find so many efficient men to make up our working committees, a help which is greatly needed in an expanding organization and business. We lumbermen are finding a wider source of supply and a broader distributing field, requiring the greatest possible co-operation to keep pace and informed. It is a common occurrence these days to find New York, Philadelphia, Baltimore, Cincinnati and Boston and southern city members selling lumber manufactured in the extreme West or South to be shipped to Canada, Chicago, Buffalo, Albany—twenty-five years ago recognized as the lumber centers. Twenty years ago Canada was a great lumber-producing country and is to-day, but our southern members also find Canada a big buyer of American lumber. (In 1912, 519,781,000 ft., value \$11,831,115.) The fact is that there is no longer any section known primarily as a lumber section—Canada and the United States are all one great lumber producing and lumber consuming market. Nova Scotia sends spruce to St. Louis; Tacoma sends spruce to Pennsylvania; Georgia sends yellow pine to Ottawa; Memphis sends oak

to California and Montreal—all of this within the last decade.

Our association comes in vital contact with every phase of the lumber business as a merchandising proposition, and while defined more particularly as a wholesale association, and while our direct interests are with the wholesaling of lumber, it remains true that every wholesaler is, in proportion to his necessity to distribute his lumber, particularly interested in what this organization does or may do to minimize waste or cost in such distribution.

All business quickly finds the line of least resistance, and our efforts to better conditions and conserve to our members and the people at large the best possible methods of delivering to the ultimate consumer our product, is the underlying principle of this great association work.

W. H. Hotchkiss of New York state sends a warning when he says he "believes that the businesses to feel the change first would be those in which the waste was greatest, and all who stand between the producing farmer and the shopworker and the ultimate consumer would be subject to the pressure of elimination." If this is true it emphasizes the necessity of our using our best efforts to study the theories and practices of distributing lumber from the sawmill man who is in the position of a farmer to the ultimate consumer. We all know that it would be impracticable to make these studies individually, therefore it seems to me that they must be done by the greatest possible co-operation and by concerted action through those associations which have been organized primarily for this purpose.

Those of you who have served on our board of trustees, standing or special committees, and have kept in touch with what we have been doing will testify that only the best motive has been our aim. I have never, in all my connection with the association, heard any small or mean proposition presented; in fact, we always have considered all matters in the light of not as to how our own members may benefit to the exclusion of others, but what is the best action for the good of all the trade in the broadest possible method.

While in the past couple of years the lumber business has been much maligned by some hidden force and often classed with the "trust" idea, this has all been so vague, and so much unfounded in fact, that there is sure to be in time a good healthy reaction, and we will find less talk of necessity of law and more of the spirit of fair business dealing. And right here it will interest you to know that with the single exception of our initial corporation needs this association has never had or needed the advice of a lawyer to tell us how to act. No organization of my knowledge has adhered to its first principles as persistently as has ours, and when we consider the diversified interests of our large membership, this means much.

I do not wish to moralize too much. It might be unseemly, and I may infringe on some of the reports of our committee chairmen, but I believe I am justified in calling particular attention to two or three of the special matters which have been in the past, and still are, the fundamental parts of this body. I refer to the bureau of information or credit department, the trade relations, the terms of sale, arbitration, etc.

Much has been said in recent years about conservation. I believe we have done as much for the principles of general conservation as any other voluntary commercial organization in this country.

We, however, are weak at one very important practice, and that is in our extension of credits. Some of us close our eyes to experiences of others and try to win out by taking our credit insurance, but, gentlemen, we can never win out by this subterfuge, as the failures of hundreds of unsuccessful merchants prove, and while a few seem to have profited by this plan it is a false economy. We must in the future give more concerted study and support to putting our credit system on a proper basis. Entirely too much money has been lost, almost foolishly, during the past few years in bad debts. Credit all along is too cheap, and while we observe a greater interest in this subject it is getting to mean much to your success in business. Possibly the excessive losses of lumbermen in the past couple of years may not have attracted your attention. They have, nevertheless, been heavy. The banking interests have not failed to notice it. We must save at this end if we would lower the cost of doing business, and too much of our time and energy is wasted through failures of those with whom we do business, and who are not entitled to the credit and confidence we extend them. We must learn that extending credit is equal to loaning money, and every sale should be made secure for a proper return to you of your principal plus your legitimate trade profit.

Our bureau of information is well equipped to disseminate the information which comes to it from you, and if you keep us informed we will do our part to give out this information in the most practical form possible, and with this knowledge properly before you, and proper methods on your part, a great waste may be stopped.

Recent government suits against retail associations have been misunderstood by many, and the principles of right trade relations should be given careful consideration. Careful study has been given these phases of business, and probably we may find it desirable to make this subject a basis of future careful study by our committees. So much depends upon a solution of this problem, as it relates to credit, economy and fair trading, that we cannot afford to overlook it, and the rule of reason as laid down by the Supreme court of the United States applies to the lumber business, as it applies to every other branch of trade.

Linked with all this is the terms of sale basis upon which we transact our business, unstable, irregular, discriminating, unsatisfactory to nearly everybody, buyer or seller, and which, considering the vast correspondence during the past six months, will be freely discussed at this meeting, and which will, if once settled satisfactorily, relieve our bureau of information, collection department and our committee on arbitration from much disagreeable work.

I had intended to say a further word regarding arbitration between members, but our committee report covers it all and makes some suggestions. It seems strange that it is so difficult to find a common plan for handling disputes between members, but I suppose that if it were easy there would also be no cause for arbitration.

Our association is entitled to a further word because of its standing and real worth as a national factor. Mr. Taft, while President, in an address given a couple of months ago, among other things said substantially:

"You will have to have a school from which the new chambers of commerce can draw their secretaries, who will train the new membership in the way in which the organization can be built up, and give them a practical knowledge of how they can do what they are organized to do."

Mr. Taft, seeing the great influence of local organizations all over the country undirected as to common purpose, suggested the organization of the Chamber of Commerce of the United States of America. Now, if it is true and is being recognized that these various organizations can do a greater good with trained secretaries, our lumber associations are to be congratulated on being well in the forefront, for it is conceded that as a class lumber organizations have had the benefit of trained secretaries almost from the first, their only weak point being that neither the association nor their secretaries have profited to the full extent of their opportunities. A school or congress of lumber secretaries and chief executive officers can undoubtedly increase the efficiency of our lumber organizations, and probably we have not been able to do as well as we could because of overlapping of efforts and a waste of time, and a greater exchange of information between sections and interests will be a source of great help. Railroads, for example, need our co-operation as well as our restraint. Information properly distributed will help to present our grievances or needs fairly as would the same principle apply to many things.

We have always very wisely steered clear of any price-making schemes or any schemes which may be construed as in any way interfering with the free course of trade in any form. Several of our associations have been organized with one definite object, thus making them specializing organizations. Our own association and some others have co-operated with these just so long as we have been able to see that they were organized on broad principles and for the general good.

The government's attitude in some of the recent suits has unquestionably enlightened us as to what may be done through properly organized associations such as ours. It is my opinion that under these enlightened conditions we will find membership in our association being eagerly sought by those who are entitled to membership therein, and it is my prediction that during the next couple of years our own association will find coming into its ranks a large number of individuals and firms who desire the information and chance for co-operative help which is herewith afforded.

Our offices at 66 Broadway, New York, are constantly being enlarged; our office force is constantly being added to, and the expense of handling our business is constantly increasing. Part of this is met by an increase of membership and part of it is also met by a greater efficiency through the accumulation of material and experience.

You will notice by the reports of our committees that there has been an increased work carried on by them for the association during the past year, and while our membership has not increased in numbers it is fair to state, and without casting any insinuations, that the general character of our association membership has greatly improved by accessions during this term. We have been accused of being too anxious to add to our members, and possibly the claims which have been made by some of our members that membership should be sought rather than coaxed is the proper method for us to pursue.

We have had the usual regular trustees' meetings as provided for, also the several meetings of the executive committee and various other committees as needs demanded. As secretary of the association, I have traveled thousands of miles in the interests of the association work; have attended the conventions of other lumber associations, as well as conventions of various other civic organizations in which we found we had a common interest.

Our railroad and transportation department has kept good pace with the ever-changing positions of the Interstate Commerce Commission and the various other state railroad commissions, all of which will be covered by reports read to you later in this convention.

I wish to again further urge that this association use its best influence to bring about a better understanding as to what is known as regular uniform terms of sale, so that there may be a greater freedom of competition and less discrimination in the matter of making contracts. It is very generally believed, and our experience leads us to acquiesce in this belief, that a uniform term of sale of lumber will work out to the benefit of the

entire lumber trade—consumer as well as retailer, wholesaler or manufacturer. We make our contracts read "regular terms," and fifty per cent of our settlements are unsatisfactory or disputed because no one knows what "regular terms" means. I believe if we can arrive at a point where a definite uniform term of sale may be adopted that there will be a great conserving of material as well as financial loss.

I wish also to emphasize and ask your support for the bureau of information in its effort to make it a uniform practice that financial statements shall be made before credit is granted, which practice would, if universal, eventually in a great degree eliminate the dishonest merchant not entitled to credit, as fifty failures during the past year have proven.

I am pleased indeed to report the association to be, in my opinion, in a strong and flourishing condition, as well equipped to perform its work as at any time in its history. This, of course, because of our accumulation of experience, effort and history, should be expected.

The members of the association are entitled to a great deal of credit for the unselfish manner in which they have again this year responded to the call whenever occasion required.

From correspondence received I believe this meeting will be one of the most profitable of any we have had, and the basis will be laid here for a very prosperous coming year. I wish to thank the members of the association for personal favors and support.

W. W. Schupner, department manager of the bureau of information, told of the workings of that bureau. He said that the demand upon the bureau last year was greater than at any other time, which was shown by records as well as by the voluminous files of correspondence with the subscribers. The report said that during the past year it has been more necessary to follow information closely, and revise and re-revise reports than ever. Every possible influence has been brought to bear upon the work. Daily conferences were held for the purpose of obtaining more detailed facts concerning financial statements.

The confidence reposed in the bureau by the trade continues to grow, and voluntary statements are becoming more frequent. This confidence has been very helpful during the last year in bringing about a better condition of affairs.

Failures last year required considerable attention, not only as regards the payment of accounts but in following up possible after-effects. Lists of creditors have had to be carefully scrutinized with a view of ascertaining if some individual creditor was in a position to stand the probable loss. This, according to the report, necessitated some pretty pointed interviews in correspondence, but no hesitation was felt in going after facts which were pertinent and absolutely necessary for complete and comprehensive reports.

The question of signed financial statements occupied a great share of the bureau's attention, and the increased satisfactory replies are most encouraging. The new concerns have usually been most prompt in signing such statements, but a considerable sentiment is felt on the part of the older concerns against complying with this request. A signed financial statement as a basis on which to secure credit is becoming an instrument which can not be treated lightly, according to the report, because some states have passed laws which make it a misdemeanor to seek credit by a written statement known to be untruthful. The federal government also has a section in the penal code which imposes penalties in this respect.

Relating of actual experience by members is a valuable feature of the bureau's report, and their effectiveness can not be doubted. Several hundred written opinions are received at the office each day, which gives an idea of the extent of the co-operation.

The system of investigating through local attorneys and similar services has been very successful. Frequent interviews are had with the bank credit men resulting in an accumulation of facts, which find their way into the reports. Some of these interviews and special correspondence from members last year revealed the report current among banking circles that because of the experiences of certain banks in becoming creditors in some large lumber failures, some discredit is caused to the lumber trade and commercial lumber paper is sometimes regarded skeptically. This matter was immediately investigated by Mr. Perry, who attended a conference of banking houses, where the character of failures in question was discussed, and the unjust and erroneous impression at least overcome.

The report stated that 2,000 complete reports, making a total now of 32,000, were added last year to the bureau's fund of information, and each year's increase means considerably more work than that of the previous year.

The report of the collection department showed a balance on hand of claims, March 1, 1912, \$260,972, of which \$134,433 is in the hands of association attorneys throughout the country and Canada, leaving \$126,539 representing claims in the course of collection through the association office. Net fees last year were \$4,800. These figures reveal a greater prestige accruing to the association through handling the larger number of claims, and also result in a corresponding increase in information for credit files. The average fee for this work has been slight.

The very prestige of the association has in a great many cases helped materially in collecting bad accounts, and when attorneys are necessary the best only are used. In fact, the association work is largely sought by leading attorneys who desire the prestige of having it known that they represent the National Wholesale Lumber Dealers' Association.

In certain instances where certain failures indicated that they would carry others in their wake, the association immediately got in touch with those likely to be involved, and assisted in plans that met with the approval of the creditors and avoided failures.

The report then told of the credit report system and the successful work of collections. In short, it indicated that the collection and information department is in the best form it ever enjoyed and is constantly proving of more benefit to the trade in every way.

The arbitration committee report was then given, through Edward Eiler, chairman. During the past year there was only one case of dispute between members of the association which reached the arbitration committee. The case was promptly decided by the unanimous vote of the three members who considered the evidence. One of the members in this case was not pleased with the decision of the arbitration committee. The report stated that decisions have in some instances resulted in the withdrawal of memberships.

The report said that the suggestion made in December, 1912, along this line resulted in the appointment of a committee by the board of trustees to investigate the present arbitration system. This is now in the hands of this special committee.

William E. Litchfield then reported for the trade relations committee. This committee has had nothing brought to its attention during the year. Harmonious relations exist between the National and other associations. The report said that wholesalers in many parts of the country have in the past and up to the present stored stocks in large yards, taking the stock acquired from the smaller mills and furnishing them with immediate capital. Many of these mills could not run without the help of the wholesale yard. The report stated that the wholesaler must of necessity search out an outlet for the mixed stock which he thus accumulates; in studying the requirements of the buying trade and post himself as to the thicknesses and kinds of wood for each market, and must also take the lumber to center points for grading and distribution.

In speaking of the retailer, the report said that he should be free from the poacher, but that he should not expect the large contractors and corporations who buy in carlots to be satisfied with any circumscribed area in which to make such purchases.

The report said further that the recent government suit has pointed out just how far trade organizations can go in the matter of distributing information. The report expressed the opinion that while the suit was decided in favor of the government, it appears to give the privilege to every man of selling unmolested his goods to whomever he chooses, and gives the buyer the right to buy his lumber from whomever he chooses.

The report then pointed out the benefits to be derived from association work through increased efficiency and organization, and through credit work.

The paper stated that companies had gotten the opinion that the

injunction granted in the government suit would make a very marked change in the position of the retailer, the wholesaler and manufacturer. The lumber trade is so well organized and so well established, however, that no change whatever has come about, and it would seem to most people that the winning of the suit by the government has cleared the atmosphere to the extent that it will cause the lumber merchant to show a deeper interest in actual conditions.

In the past very often lumbermen have refrained from selling wholesale orders, but the report says that with the increased knowledge due to the clearing up of the situation by the government's suit, this condition will not prevail.

The paper expresses the opinion that the government's injunction does not stop the various retail associations from giving to their members such legitimate information as they may need to conserve their best business interests or to extend to each other such information as will help in the matter of credits, etc.

The report closes with the statement that credit organizations and trade relations matter can be of great good to the country at large if properly conducted, and if frequent conferences are held with open discussion about the methods of improving conditions, having always in mind that good must be done so that it will be for the benefit of all.

The committee on nomination of trustees, relations, etc., was then appointed and the meeting adjourned until the afternoon.

AFTERNOON SESSION

The afternoon session was opened with a report by the committee on terms of sale and trade ethics, read by F. S. Underhill, chairman. The report stated that at last year's convention the committee recommended certain changes in the wording of the terms of sale of the association. These changes were based on the recommendation of the legal department that had found that the order or acknowledgement forms used by association members were defective in that they had resulted in unsatisfactory arrangements between members on various occasions, and would be inefficient if used in court. These forms were changed according to the suggestions by the committee, and the new order of forms can be procured through the association offices. The report told of a letter issued by the board of trustees recommending in connection with terms of sale, that while it is recognized that terms of sale are not uniform, still the practice used by some concerns of making settlements without due or reasonable regard for the terms of the shipper, is unjust and every effort should be made to break it up.

The report said that every member of the association ought to take a firm stand that a discount was in no sense a commission, but merely an allowance made for the express purpose of securing immediate or prompt payments of accounts. The report said that if terms of sale were more uniform throughout the trade many problems confronting the association in this matter would be eliminated.

The report further stated that the wholesaler is more delinquent in insisting upon the adherence to terms of sale than is the manufacturer, and said that it is manifest that such practice as taking the discount from the gross delivered amount of the invoice, including freight, ought to be forcibly handled and the practices broken up. The report also stated that the encouraging of such terms of sales as "two per cent discount from net amount of invoice thirty days after the arrival of car," or "net cash ninety days after the arrival of car" ought to be discouraged, and a determined effort made to discontinue such practices.

A discussion of this report followed.

W. S. Phippen, traffic manager of the association, then delivered his report. The report stated that in addition to freight investigation and collection of freight claims, the transportation bureau had handled for over two hundred individual members several hundred other matters such as tracing and diverting cars, locating and stopping delivery of shipments owing to financial insolvency of consignees, and straightening out cases where carriers

delivered ordered shipments without the bills of lading. Readjustment of rates on hemlock from stations on the Asheville branch of the Southern Railroad were secured; also publication of through rates on the R. F. & P. to points on the Maryland & Pennsylvania Railroad; a water competitive rate of fifteen cents from Norfolk to Neponset, Mass., was obtained and erroneous rates in various other tariffs were corrected. These matters also involved reparations through the Interstate Commerce Commission for amounts aggregating \$500.

The report stated that the Interstate Commerce Commission has ruled that interest shall be paid by carriers on overcharges from the time the money to be refunded has been improperly collected.

In speaking of lighterage conditions in New York, the report said that many complaints were received of damage to lumber from improperly equipped or leaking boats. A thorough investigation was made, and the assurance of better lighterage service and better boats was secured.

After referring to the proposed increase in rates to Canadian points, the report took up the question of the weighing investigation. The various hearings on this question were reviewed. The last meeting was held in Chicago, February 26 and 27. This meeting is reviewed in another part of this issue.

The discussion of the wooden box case referred particularly to the so-called Pridham case in California. The Pridham company manufactures fiber boxes and demanded the same classification on eastbound shipments as on shipments westbound to California. This classification provides that freight shipments in fiber or pulp board packages will take the same rate as goods shipped in wooden packages.

Reference was made to the milling-in-transit question, which was reviewed and the various controversies noted. This question was more fully covered in a previous issue of *HARDWOOD RECORD*.

The report referred to an order recently made public by the Interstate Commerce Commission of investigations in which it gives notice of its intention of going into the question as to just what should be set forth in a freight bill or receipt. This inquiry is based on the fact that carriers have not in force reasonable regulations and practices affecting receipts or bills for freight charges. It has been contended at different times by wholesalers that some shippers ascertain from railroad agents the name of ultimate consignees, and also that some consignees in the same manner are put in touch with the name of shippers, thereby defeating the business of the legitimate wholesaler.

Referring to the question of undercharge bills submitted by the railroads, the report stated that the commission in a recent report to Congress recommended that the Interstate Commerce Commission act be amended providing that it be compulsory for carriers to collect undercharge bills within a reasonable period, perhaps ninety days, and if not collected until after that time they should be deemed guilty of giving a rebate. No action has been taken, however, and the report suggests that attention along the line of the commissioners' recommendation be given.

B. F. Betts, chairman of the committee on transportation and railroads, then reported. This report reviewed the work of the committee the past year and referred particularly to railroad weighing matters and milling-in-transit. Reference to the hearing before the Interstate Commerce Commission was brought out, which showed that a large proportion of freight cars are unstenciled as to actual tare weight, and that scale manufacturers acknowledge that it is impossible to correctly weigh cars coupled and in transit over scales.

Referring to the milling-in-transit question, the report said that the association was requested by the exporters' association to join them in a petition asking for a longer period than forty-eight hours for loading or unloading shipments of lumber of over 50,000 feet, and that half holidays should not be counted in the time period.

The report referred to the agitation for lower rates on inferior lumber. In referring the subject to the board of trustees, it was deemed inadvisable to make any change in the present lumber

rates on the ground that if lower rates were made on boxes, higher rates would soon be established on the better grades.

The report referred to the securing by the transportation bureau of a ruling from the Interstate Commerce Commission which said that it is unlawful for a carrier to disclose to a shipper the name of the ultimate consignee of a shipment re-consigned in transit by the original consignee.

The report of the legislation committee was then read by J. A. Christie, chairman. He said that nothing of importance had been accomplished as nothing had been referred to the committee for its consideration. The chairman said that he had written to the members of the committee recently asking for any suggestions that might be embodied in a report, and the invariable reply was that owing to satisfactory conditions and excellent outlook, they had no suggestions to make for any new legislation.

The special committee on car stakes delivered its report through chairman George F. Craig. The report stated that the position of the lumber shippers on the car stake question was just, and that the majority of roads will admit its justice. Delay in obtaining an equitable settlement is costing the lumbermen many times over the expense incurred in the former efforts, as well as the additional cost of further action. The report concluded with the statement that profiting by past experience there is fair grounds for further prosecuting the contention with reasonable encouragement to expect a renewal of the former decision of the case.

George H. Holt, chairman of the committee on fire insurance, then reported for that body. The report said that more than six hundred bills had been presented during the past year through various legislators in different states, for the purpose of regulating or controlling fire insurance business. Public sentiment has undoubtedly been aroused and is determined to make itself felt in this question. The report reviewed the various insurance bills which have been adopted in different states, and then turned to a discussion of the so-called arson trust, which is commanding so much attention throughout the country.

The report told of the work being done by the consolidated power of insurance companies to discredit lumber and the use of wood for any purpose. This effort has been along the lines of promulgating building codes and restrictions which are being pressed upon cities for adoption. It stated that the movement has succeeded to such an extent in cities that property owners and architects have discovered that the new enterprises and population are settling in the smaller towns where such restrictions are not in force. Efforts are being made by the same element to have the restrictions made nation-wide ultimately.

The report suggested that the power of the various industries allied in the manufacture of various products of the forests is tremendous, and that by consolidating its influence the insurance evil and the campaign against wood products can be successfully made.

The report then proposed a remedy regarding the buying of insurance, giving a committee of buyers of insurance, not sellers, authority to supervise and place insurance for the group, thus lowering the cost of getting the business to the companies and resulting in better distribution of the risks, and decreasing the fire loss by eliminating the moral hazard. The same committee, according to the suggestion, might be empowered to represent all members in the matter of fire loss adjustment.

FRIDAY'S SESSION

The session of Friday morning was opened by a report of the coastwise insurance committee.

Following the report of this committee, F. R. Babcock, counselor to the Chamber of Commerce of the United States, reported. The report reviewed the efforts leading up to and eventually resulting in the present National Chamber of Commerce, and reviewed the vast scope of power promised through such an organization, which scope has been realized since the effort culminated in the formation of that association. This organization was organized at the Hotel Willard, Washington, D. C., on April 22, 1912. There were approximately 900 delegates present, representing nearly every

industrial and commercial organization in the United States. Harry A. Wheeler of Chicago was elected president, and in addition there were elected four vice-presidents, treasurer, secretary, assistant secretary and various other officers. The various officers were appointed with the idea of having a representation from all sections of the country, and of all kinds of manufacture and commerce.

The report reviewed the sentiment as expressed regarding the many organized chambers of commerce, stating that it is very favorably considered in all official and legislative circles. The speaker reviewed the proceedings of the first annual meeting of the association. The meeting was held at Washington, January 21, 22 and 23. The first annual banquet was held on Wednesday evening during that meeting, and among the speakers were President Taft and Dr. Elliott, ex-president of Harvard University. The speeches of both these gentlemen strongly urged the need of such an organization.

Resolutions were adopted by the National Chamber of Commerce at this meeting on the Page bill, which bill was endorsed in its essential provisions, and urged upon Congress for enactment. This is a bill to provide for compulsory education up to a certain age. The Pomerene bill providing for safeguarding cotton bills of lading against forgery was endorsed.

In speaking of the order of the recent administration providing for examination for entrance to the consular and diplomatic service, the promotion from grade to grade, the association stated that it should be given recognition, stability and permanency by enactment into law. Considering a banking and currency system, resolutions on this question were referred to the board of directors for action.

Resolutions endorsing the idea of a permanent tariff commission were adopted.

This report was followed by a discussion.

John M. Woods reported for the committee on forestry as follows:

Report of Forestry Committee

The committee on forestry respectfully beg to submit the following report:

We view with deep concern the efforts that are being made in Congress and some of the state legislatures to turn over the national forests, their management and resources, to the states in which they are located. We believe these national forests are the property of the whole people and are the most significant and concrete expression of the principle of conservation. Under the present intelligent management of the national government, monopoly of these public resources is prevented, their present and future uses for all the people secured. Once public ownership is surrendered, the three great resources—timber, water and forage—will quickly be monopolized for private advantage. The financial burden for the protection, administration and development of these forests would involve a financial burden far beyond the ability of any state to assume. With the general government in control of these forests a sound, stable policy will be assured, free from any local, political or other influences, whereas, if left to the several states in which they are located, they will be made the football of private interests and political factions. This change can only mean the abandonment of forest conservation as a sound and safe public policy, and presenting to a few states wealth that figures can hardly express, and that rightfully belong to all the states. There is no mistaking the attitude of many senators and representatives toward the ownership and management of these vast national resources. This is shown in curtailment of appropriations and all manner of criticisms. There should be the amplest appropriation for the prevention of forest fires and investigation of the value of what is both above and below the surface and of the practical and financial value of the water of which the forest is the natural storage reservoir. There will probably be an extra session of Congress which will attempt a revision of the tariff all along the line, including lumber and forest products. Your committee does not deem it wise, in view of the probable divergence of opinion existing in our association on the tariff, to make any specific recommendations, believing that all who are interested for or against any change should communicate their views to their senators and representatives in Congress. While the tariff is made a political question, it should be taken out of that domain, and become, as it is a purely business matter and should be worked out as in Germany, by a permanent non-partisan board of competent tariff experts.

We are dealing with a great vital living question affecting the present and future happiness and prosperity of ninety millions of people. Are we, as an association, and individuals, doing our whole duty and making our influence for good felt, not only in our own business, but in that wider field, the public and lawmaking bodies? State and national legislatures are flooded with bills affecting either directly or indirectly every member of

this association. President DeLaney, of the Hardwood Manufacturers' Association, Feb. 4, said: "A subject which should be given attention is the probable enactment, in most states, of a workmen's compensation law in order that just and proper bills may be enacted, and that all states have bills of similarity to prevent confusion. This brings to my mind the vital question of citizenship. Many of us refuse to participate in local politics, fearing revenge at the hands of the politicians. This to my mind is the height of cowardice. As property owners and citizens we should assert ourselves." Your chairman would like to see this association and every commercial organization throughout the land have the moral courage to take up, discuss and vote on the great questions affecting not only our own industry, but the public welfare. It would have great weight with legislators, especially if supplemented by a personal letter of your senator or representative. It seems to me the prayer of every lumberman and good citizen ought to be:

"God give us men,

A time like this demands,

Strong minds, great hearts, true faith and ready hands;

Men whom the lust of office does not kill,

Men whom the lust of office cannot buy,

Men who possess opinions and a will,

Men who have honor, men who will not lie,

Men who can stand before a demagogue

And down his treacherous flatteries without winking;

Tall men, sun-crowned, who live above the fog,

In public duty and in private thinking."

Following the report of Mr. Woods', the advisory committee to the American Forestry Association reported through Chairman R. C. Lippincott. The chairman reported that there was little to speak of in the matter of accomplishment for the past year. There was no communication of the advisory board directly with the American Forestry Association.

The report told of the rapid growth in numbers, financial strength and public prestige of the American Forestry Association and reviewed the effort leading up to the enactment of the Week's bill providing for Appalachian and White Mountain forest reserves. It told of the work that has already been done in the matter of purchasing timberlands for water reserves with the appropriations provided by this act.

The report reviewed the work done in the matter of forest fire prevention, and said that frequent discussions of this question such as are effected through the various meetings of the American Forestry Association, would result in the eventual successful solution of the problem. Already a great deal of valuable and efficient work has been done in the matter of protecting the forests against fire.

Referring to the agitation which has been going on for some time in the matter of the transferring of the national forests to the control of the states, the committee went on record as being distinctly and unconditionally opposed to any such action, and endorsed the policy and accomplishments of the federal forest service, and stated that the attempt to return forest lands to state control is merely an effort on the part of those interested in fraudulent exploitation and national reserves to get state reserves in a position where they are available. The report closes with an appeal to members of the association for membership in the American Forestry Association. All were urged to join who had not already done so.

At the final afternoon session of the organization, on Friday, the following trustees were elected for three years:

N. H. Walcott, Providence, R. I.;

F. R. Babcock, Pittsburgh, Pa.;

R. M. Carrier, Sardis, Miss.;

F. B. Robertson, Memphis, Tenn.;

O. O. Adler, Chicago, Ill.;

J. Randall Williams, Philadelphia, Pa.;

T. M. Brown, Louisville, Ky.

Following the adjournment, the board of trustees held a meeting, and agreeable to the expressed wish of the association, Nelson H. Walcott of Providence was elected president; Gordon C. Edwards of Ottawa was elected first vice-president; W. W. Knight of Indianapolis, second vice-president; Henry Cape was elected treasurer, and E. F. Perry was continued as secretary.

The social feature of the National Wholesale Lumber Dealers' Association convention found its usual expression in a banquet held at the Chelsea hotel, on Friday evening, which brought out the usual large attendance; in fact, the banquet hall was crowded to

the limit to accommodate everyone. A great many wives of members were present.

The speaker of the evening was H. M. MacDonald, K. C., member of parliament, Pictou, Nova Scotia. His subject, "Canada," was handled in a very able manner.

J. Hampton Moore, president of the Atlantic Deep Waterways Association, and D. J. Lewis, congressman from Maryland, were also prominent speakers at the occasion.

It goes without saying that in the selection of Mr. Walcott as president of the National Wholesale Lumber Dealers' Association, great wisdom has been displayed. Mr. Walcott is a man who

stands very high in lumber affairs, and is one of the most prominent, aggressive and intelligent members of the fraternity of the entire East. He has been a hard worker for the association for many years, and this is a just recognition of his abilities and talents that is worthy of the organization. He surely will carry the affairs of the organization to still higher standards of good business results and good business morals that have prevailed in the past.

Nothing but words of encomium can be said for F. E. Parker, who has been a very faithful and competent incumbent of the position of president for the past year.



Flooring Factories Progressive



A good deal of ground might be found for the contention that flooring factories, as a whole, are among the most progressive in the entire hardwood and woodworking field. The average manufacturer of hardwood flooring realizes that he is turning out a quality product and that he cannot give too much attention to its manufacture; and while it is said by those who have had experience that the flooring business still needs education on the subject of how to get proper prices for its product, there is little fault to be found in the factory end, at all events.

One feature of flooring factories that commends itself is the way in which dry kilns are made use of. In proportion to the amount of lumber consumed, it is probable that the well-managed flooring factory has a larger kiln capacity than the typical plant in any other line. In fact, a big manufacturer recently stated that he had enlarged his kilns to a considerable extent with the idea of reducing the cost of handling material to the minimum. This is possible in a good many cases, because the flooring factory is often located in a hardwood lumber market, so as to enable the manufacturer to pick up his oak without much trouble, and to get prompt deliveries.

When conditions are favorable, the factory can be operated at full capacity with no lumber being handled in and out of the yard whatever. The operations of the kiln can be adjusted so that lumber received is put into the drying apparatus, instead of the yard, and taken out for immediate use, so that there is no necessity for piling the material on the yard, and then rehandling it when the time comes to put it into the kiln. If this method can be worked out, a saving of something like \$1 a thousand on the lumber used is effected, less the cost of building and maintaining the additional kilns made necessary by this system.

A stunt which is said to affect production costs favorably in a good many flooring factories, especially those making plain oak, is ripping the strips on a gang edger. It is worth noting that the custom is confined almost entirely to those using plain oak, as quartered oak flooring manufacturers as a rule contend that the character of their material does not warrant the use of the gang edger for ripping purposes. The obvious advantage is secured in the greater volume of work that can be done, and the greater accuracy of the work; for, say what you will, there are bound to be inaccuracies in ripping on a single saw, for the sawyer cannot hold the strip against the guide firmly and evenly enough to insure absolute accuracy, as is certain to be the case when the piece is cut between two saws.

Some flooring manufacturers who have investigated this plan believe that the chance for waste is greater on account of the fact that the work is done more or less mechanically, the material being fed into the edger without any opportunity for discrimination and selection to be exercised. But the waste problem cannot always be taken care of at the saw; it calls for a broader policy than that. In fact, one of the big factories which does use gang edgers in ripping has a remarkably small amount of waste, because it takes occasion to work all of its offal into narrow stock like crate material, binder strips, etc.

But it is plain that when a manufacturer is producing quartered oak flooring, and has a chance to save money by the proper use of his lumber, there are plenty of opportunities for him to do so if he is ripping his stock on a single saw. One flooring concern which uses this plan turns out little or no $\frac{1}{2}$ " select flooring, throwing out strips of that grade to be worked into something else for which there is a better demand and on which there may be more profit, confining its production of this particular thickness to clear flooring, and working up selects, by means of resawing, into thinner stock.

By putting it up to the experienced sawyer to get the most out of the lumber that there is to be had, the manufacturer insures losing no values in high-priced quartered oak and similar material. He pays more for labor, of course, and it is simply a question of determining which element is the most important in dollars and cents.

The situation may be likened to that in the sawmill business. In a good many small mills, turning out high-priced lumber from high-priced logs, the manufacturer cuts all thicknesses, every log being carefully scanned and sawed into the dimensions which will produce the best grades. In this way the lumberman loses nothing of the value of his timber. But on the other hand when the operations of a big mill cutting from 50,000 to 100,000 feet of lumber a day are investigated, it is customary to find attention being concentrated on a few thicknesses; sometimes on one, such as inch lumber. The manufacturer in this case is concerned principally with getting out a big production in order to keep his manufacturing costs low. This he has to do because of his large overhead expense. The smaller plant has an entirely different problem, and handles it differently.

Another interesting department of the flooring business is the warehouse proposition. Inasmuch as flooring is used in construction work, sales are a seasonal proposition. The extent of the periods may depend on the selling system employed by the manufacturer, and will be affected by whether he sells through jobbers, who in turn sell to the contractor, or direct to the latter. But in any event it is usually necessary to store a considerable amount of stock to take care of the heavy business which it is known will come later.

Adjusting the capacity of the factory to the facilities of the warehouse, and vice versa, is a nice problem for the flooring man. Shall he attempt to make capital out of his storage facilities by keeping his plant going at top speed all the time, and carrying a lot of flooring in stock, compared with the daily output of the factory; or shall he increase his manufacturing facilities, using the warehouse merely as a means of tiding over the occasional dull periods, and not as an actual complement of the manufacturing end of the business?

If a big warehouse is put into service as a kind of reservoir, into which is put stock which will not be sold for some months ahead, the manufacturer immediately faces a charge for interest on this idle capital; but he makes up for it in having a smaller investment in machinery, and in being able to operate his plant

at the maximum efficiency by running full time all the year round. The man with the big factory and the relatively small warehouse must cut down his operations now and then to wait for the market to catch up with him; the other man, having figured this variation in the demand in advance, is less troubled with fluctuations, due, as indicated, to the seasonal character of the business.

Flooring factories as a rule are giving more attention to the human factor than most other branches of the lumber and allied trades. For instance, over each of the planers in a southern hardwood flooring plant is a sign carrying the word, "Think!" While the effect of this legend upon the operatives doubtless becomes less with the passage of time, it is an admonition that must have a lot of real effect. And in the same plant the production of the various machines is listed daily, comparisons with previous years being kept, so that the men can see whether they

are keeping up with their competitors, and whether the factory as a whole is doing as well as it formerly did. This stimulates interest and develops the spirit of competition which is relied upon by many to aid in the work of an industrial organization.

In the same connection, as well as from a mechanical standpoint, the uniform attention given to lighting is of interest. In one big factory which the writer visited not long ago, the wall was practically made of glass; while overhead skylights furnished additional natural illumination. The relation of good daylight to good work is better understood in the metal-working trades, probably, than in woodworking; and flooring men who have seen the advantages, with the idea of aiding the condition and increasing the comfort of their men, of good lighting are realizing upon whatever additional investment is required to get it in the form of better work and fewer accidents.

The Mail Bag

Any reader of **HARDWOOD RECORD** desiring to communicate with any of the inquirers listed in this section can have the addresses on written request to the Mail Bag Department, **HARDWOOD RECORD**, 537 South Dearborn Street, Chicago, and referring to the number at the head of each letter and enclosing a self-addressed stamped envelope.

B 407—Seeks Oak and Ash Truck Poles

New York, N. Y., Feb. 25.—Editor **HARDWOOD RECORD**: We would like to have the names of some reputable sawmills who want to supply and who know how to properly cut good oak and ash truck poles.

Trusting you may be in a position to let us have this information, and thanking you in advance for your courtesy, and with best wishes we remain,

The above has been supplied with a list of manufacturers of wagon stock, who would probably be in a position to cut the stock desired.—EDITOR.

B 408—In the Market for Ash Logs

Boston, Mass., Mar. 4.—Editor **HARDWOOD RECORD**: Can you give us the addresses of some small mills that manufacture ash or could you give us any information regarding parties who might furnish several cars of ash logs?

A list of ash lumber producers and a source of supply for ash logs has been furnished the above correspondent. Would be pleased to hear from handlers of ash logs who would like to be placed in touch with this prospective customer.—EDITOR.

News Miscellany

Chicago Weight Hearing

The last hearing on railroad weights was held in Chicago on Feb. 26 and 27. At this hearing, in answer to Commissioner Prouty's statement that what was desired was some method of settling disputes in regard to weights, Mr. Maegly of the Santa Fe explained that committees of the American Railway Association have the matter in hand, and will probably present a partial report at the May meeting of that association. Mr. Hale, chairman of the American Railway Association, made the following suggestions which he thought should be covered in the briefs and arguments which might be filed with the commission:

- Light Weights of Cars:
 - Rules, reports and tolerance.
- Standards of Scales and Weighing:
 - Weighing machine tolerance.
 - Weighing in motion—uncoupled at both ends.
 - Weighing in motion—coupled at both ends.
 - Weighing standing—uncoupled at both ends.
 - Weighing standing—coupled at both ends.
- Rules—Uniform:
 - Test weighing.
 - Railroad and shipping weights.
- Miscellaneous:
 - Pilfering.
 - Refuse and clean cars.

Commissioner Prouty stated his belief that the railroads should file briefs and also argue the matter before the commission. He said that the lines suggested by Mr. Hale were substantially what he had in mind, except that he would put at the head of the list the question of federal control as to the whole matter of scales and their operations and the extent to which such control should go. He wanted to know, under the matter of tolerance, what was the limit of accuracy that might be expected

from the track scales and what was to be done when discrepancies in weights occur. He thought that weighing should be done as early as possible after the shipment was in the custody of the carrier and that the shipper should be notified of the weight obtained at that time and that that weight should govern throughout, unless changed for very satisfactory reasons. He also thought that if change was made by the carrier, the shipper should be notified, because, under the present practice, the shipper never knows of the change until complaint is made to him by the consignee, when it is too late to determine whether the complaint is well founded.

The hearing was adjourned to Mar. 10 at Philadelphia, and it was stated that the case would probably be argued about the first week in May and that anyone desiring to prepare a brief or submit argument should notify the commission prior to Apr. 15.

Meeting Baltimore Exchange

The monthly meeting of the Baltimore Lumber Exchange, held Mar. 3, while largely attended and very enjoyable, was productive of little business. Only some routine matters received attention, the business session lasting hardly more than fifteen minutes. The members then adjourned to the dining hall, where an excellent luncheon, served in the best style of the club, was partaken of. About fifty lumbermen were present, one of the visitors being K. C. Evarts, secretary of the Retail Lumber Dealers' Association of the state of New York, with headquarters in the Chamber of Commerce building at Rochester. President Theodore Mottu of Theodore Mottu & Co., occupied the chair, and L. H. Gwaltney of the American Lumber Company, was secretary.

Meeting of New Jersey Lumbermen

The annual meeting and banquet of the New Jersey Lumbermen's Protective Association was held at the "Washington," this city, Feb. 26. The business session was called to order by President Geo. A. Smock at 2 o'clock. There were over 150 in attendance.

Reports of officers and committees were read reviewing the work of the past year. Special attention was given to the suit of the government against the Eastern States Retail Lumber Dealers' Association, of which the New Jersey association is a member. A. B. Cruikshank, counsel for the lumbermen, addressed the meeting and reviewed the decision of the circuit court, which was adverse to the associations. He pointed out that the court ruled in favor of the lumbermen on all questions of fact, reducing the decision to one of pure law. The directors of the association had previously voted in favor of taking the case to the Supreme court at Washington, and Mr. Cruikshank's talk at the meeting roused the membership to great enthusiasm, and by vote the association went on record as favoring appeal to the highest court. The course followed by counsel and the special defense committee was also endorsed.

Jas. Sherlock Davis and John F. Steeves, lumbermen of New York, members of the defense committee also reviewed the case.

A tentative draft of proposed changes in the by-laws and constitution was read to the meeting and referred to a committee of three to report back at a special meeting of the association.

The election of officers resulted as follows: President, I. Newton Rudgers, Montclair; vice-president, M. T. Brewster, Little Ferry; treasurer, J. F. Glasby, Newark. Directors for three years: I. A. Collins, Morristown; H. V. Weeks, Weehawken; W. D. Gulick, Washington; S. H. Vanderbeek, Jersey City, and S. F. Bailey, Newark.

The chief speaker of the evening was Gov. Fielder of New Jersey, who succeeds President-elect Wilson. Mr. Fielder addressed the diners and spoke on the lien law, a subject of peculiar interest to the material men of the state who have been trying for some time to have the law changed in some respects. Mr. Fielder has consistently opposed the dealers and took occasion to explain his attitude. He closed with some complimentary remarks for his distinguished predecessor.

During the courses there was much entertainment and good music and a word of praise for the committee in charge is in order.

Monthly Meeting Cincinnati Lumbermen's Club

At the regular monthly meeting of the Cincinnati Lumbermen's Club at the Business Men's Club March 3, there was much gloom and sadness over

The total export value of wood and its manufactures was \$9,477,430 in January, 1913, as against \$7,066,242 January, 1912. Total export value of logs and other round timber, including hickory, oak, walnut and others, was \$425,260 last January, and the preceding January was \$278,471. The total export value of hewn and sawed timbers was \$1,064,092, January, 1913, which is considerably more than twice the export value of the same commodities January the year before. Such manufactured lumber as boards, planks, deals, joists and scantling in the various kinds of woods were exported from this country January, 1913, to the aggregate value of \$4,799,752, as against \$3,797,012 January, 1912. Thus it will be seen that the value of export lumber increased practically \$1,000,000 during the year. The value of railroad ties exported the past January was \$172,786. Shingles showed a satisfactory increase, as did box shooks. The value of export staves practically doubled, while about \$100,000 was added to the value of export furniture.

Death of Cliff S. Walker

Cliff S. Walker, president of the Bayou Land and Lumber Company, vice-president of the Tensas River Lumber Company, both of Cincinnati, O., and an ex-president of the Cincinnati Lumbermen's Club, died at his home in Covington Sunday morning, Feb. 23, after an illness of several months, death resulting from a general break down followed by complications. Mr. Walker was one of the best-known and most beloved lumbermen in this section, as well as a very successful business man. He had resided in Covington, Ky., most of his life time and was recently, since his illness, elected to the board of education of Covington, which position he was never able to fill owing to ill health. He resigned for that reason a few weeks ago.

Mr. Walker was born Jan. 4, 1855, in Newport, Ky. His mother was Eliza Lee Stuart of Maysville, Ky. His father, William Perry Walker of Flemingsburg, Ky., was a steamboat owner, plying between Cincinnati and New Orleans, in which vocation he was succeeded by the deceased, who became a very well-known and successful steamboatman, after the completion of his education, which was had at the old Chickering Institute. He was married to Tillie Taliferro Armstrong in 1879 at Augusta, Ky. Mrs. Walker's home. Of this supremely happy marriage, one son, Stuart, was born who is now manager of the David Belasco Theatrical Company of New York City.

In 1884 Mr. Walker took charge of the old River and Railroad Transfer and was manager of this property for about eight years, at the end of which time it was sold to the C. H. & D. Railway. He became traveling freight agent for the C. H. & D. at that time and later became the general southern agent for this line, in which capacity he met many of his present friends among the lumbermen. When the C. H. & D. was sold, he left the road and became president of the Southern Creosoting Company of Slidell, La. After a few years his health began to fail and he came north again in 1907 and established the Bayou Land and Lumber Company, of which he was president.

He was twice elected president of the Lumbermen's Club, his re-election being the source of much happiness to him. During his first term he inaugurated the now well-known policy of the club known as the "square deal," being a compulsory arbitration of differences when lumber shipments are in dispute. The policy has been successfully followed ever since. He was a thirty-second degree Mason, belonging to Covington Lodge, Covington Chapter and Covington Commandery. Mr. Walker was noted for his kindness of heart, his gentle spirit being much in evidence on many occasions well remembered by his host of friends in the lumber trade and elsewhere. During the latter part of 1912 his health failed rapidly and on Dec. 4, he took to his bed and passed away on Feb. 23, at the home, 219 Garrard St., Covington, Ky., in which he took so much pride. The funeral was held at 11 a. m. Tuesday, Feb. 25, and was well attended by the members of the Lumbermen's Club, the honorary pallbearers of the club being President Chas. F. Shields, Secretary J. A. Bolser, W. A. Bennett and S. W. Richey. At beautiful Spring Grove Cemetery in Cincinnati the remains were placed tenderly in the vault for the present, the intention of the family being to erect a suitable mausoleum.

Chicago Lumbermen's Club Has Two Tickets

Monday, Mar. 17, will be the date of the first annual meeting and election of officers of the Lumbermen's Club of Chicago. In addition to the regular ticket provided by the by-laws another ticket, designated as the "members' ticket," has been put in the field.

The officers on the regular ticket are: President, F. R. Gadd; vice-president, John Claney; treasurer, S. C. Bennett, and secretary, T. A. McElreath.

The members' ticket will be made up from the following: President, E. H. Defebaugh; vice-president, Ben Collins, Jr.; treasurer, Robert Sullivan; secretary, A. H. Ruth.

The trustees on both tickets are the same.

Purchases Mill on Honey Island

The Louisiana Hardwood Lumber Company, located at Honey Island, La., recently sold out its entire plant and property to the Globe Packing Box Company, of New Orleans. The transaction involved a tract of 15,000 acres of hardwood timber, a band mill, tram road and smaller mill equipment. The Globe Packing Box Company will, shortly, begin the construction of a large veneer plant adjoining the present property.

The mill is located on Honey Island between the East and West Pearl rivers, forty-five miles north of New Orleans, on the N. L. & N. O. railroad. S. S. Levy, of New Orleans, is president, and L. M. Levinson, of the same city, is general manager of the new company.

The Southern Hardwood Company Organized at Louisville

The Southern Hardwood Company is the style of a new incorporation under the laws of Kentucky to operate at Louisville. The concern will have a capital stock of \$10,000 and will do a general wholesale lumber business in all southern hardwoods, yellow pine and cypress.

J. M. Wells, prominently known for his connection with the sales departments of various large hardwood operations, is president and general manager of the new company. Mr. Wells has spent a great deal of his time in close touch with the selling and producing end of lumber, his first connection having been with the Tallahatchie Lumber Company at Philipp, Miss. From this concern he went with the Lucas Land & Lumber Company, of Paducah, Ky., and recently changed his connection, going with the Sherrill-King Mill & Lumber Company, of the same place. He was sales manager in all three locations.

The Broom Handle Market

This has been one of the most surprising and at the same time one of the most pleasing seasons that the broom handle trade has ever known. Trade was very slow in starting last fall and came in spurts as most of the broom men bought handles in small quantities and then only just when they had to have them; but when they did commence to buy they soon had the handle men bustling, as nearly all the factories wanted to buy low grades, something that had always before been hard to dispose of. It seemed that all the broom men were trying to reduce expenses and were trying out cheaper handles. Some of them found that the cheaper handles were all right for their class of trade and they have

continued to use them, while others have had to go back to the purchase of nothing but the highest grades of handles. This in itself is very pleasing to the handle manufacturers, as it has been rather difficult in past years to dispose of all the low-grade handles that were made, and in fact large quantities of them were exported. This has been one cause of higher grades advancing in price every year. The low grades have always and are yet sold at a price that will not pay for the lumber used in making them, and the high grades would have to sell for a price high enough to pay for the loss on these and make a profit on the entire output. There is no doubt that if the trade had not been brisk enough on the low grades this past season, so that the prices on them could be raised, the price on the higher grades would have advanced at least two dollars per thousand. This increase is coming this fall and will probably amount to an average of one dollar per thousand and on all grades of handles. This will be necessary as hard maple lumber has advanced from two to four dollars per M feet during the past six months and labor keeps asking more all the time. The price of lumber has reached a point where the broom handle man cannot use first and second lumber for handles. The waste problem is the worst thing to contend with in using the lower grades of lumber, but it has to be met and worked out. It is possible to cut

a good deal of dimension stock out of the cuttings from the ends of the maple boards. This will bring in from two to three dollars less than the lumber cost in the first place, but it is better than throwing it away or burning it up, as was formerly done. The edgings from the rip saw and the culled squares from the lathes are worked into strips for special purposes that have a sale at some price, and the culled turned handles can be worked down into handles for tow brooms. All these assist in making up the sales account, and while none of these items will pay a profit, yet they are all made from stock that was formerly burned up as waste. Now if some way or place can be found to sell all sawdust and shavings at a price a little better than the cost of getting them ready or rather of putting them in shape to handle, the handle man will be then really getting everything out of the lumber that it is possible to get. The idea of every handle man is to get as much out of his lumber or logs as it is possible and to make as few low-grade handles as he possibly can; but it seems that no matter how carefully the lumber and the squares are graded, the manufacturer gets more of them than he cares for.

New Paving Block Specifications

Last week the Association for the Standardization of Paving Materials held a four days' session at the Fort Pitt hotel, Pittsburgh. The paving block committee went into executive session on Thursday and finally brought out these recommendations:

First, that black gum be eliminated as paving block material.

Second, that Oregon fir be used in territory from the Canadian line to southern California and along the Pacific Coast.

Third, that larch might be used in the Central West, although this wood is now included in its present recommendation under a synonym.

Fourth, that long-leaf, short-leaf and loblolly pine be admitted to speci-



THE LATE CLIFFORD S. WALKER.
CINCINNATI, O.

tifications, and that in a low percentage the average number of annular rings be reduced from eight to seven and from a minimum of six to five.

Fifth, that the gravity of the sawing blocks be not less than 1.08 nor more than 1.11 at a temperature of 75 degrees centigrade.

Sixth, that specifications for light gravity lumber retained only that no water be allowed.

Seventh, that oil preservative be changed to be not less than sixteen pounds per cubic foot.

Eighth, that in localities where certain woods have been found by experiment to be satisfactory these could be specified in paying block contracts.

Baltimore Concern Fails

Disaster has overtaken another hardwood exporter, Robert McLean, who occupies offices in the Stewart building, Lombard and Gay streets, and who petitioned the United States court here, on Feb. 21, for the benefit of the bankruptcy act. Thomas Foley Hiskey has been appointed referee to take testimony, and the matter is to come up on March 13 for a hearing. Mr. Hiskey will later make a report to Judge Rose on the matter. Mr. McLean, who has been engaged in the export business for a number of years, gives his liabilities as \$66,699.86 and his assets as \$19,465.72. He states that his troubles are mainly due to the wiping out of about \$35,000 by the receivership of the Norva Land and Lumber Company, of which he was an officer, the property of the company having been bid in by some of the stockholders, and the stock thus being wiped out. He had been abroad trying to make arrangements whereby he might be enabled to tide matters over, but was not successful. His embarrassments do not, in any way, affect the Battery Park Lumber Corporation, in which he is an officer, and which operates a mill at Battery Park, Va. Mr. McLean, in his export business, has made a specialty of gum and has made quite a market for it.

The New Cartier Mill Nearing Completion

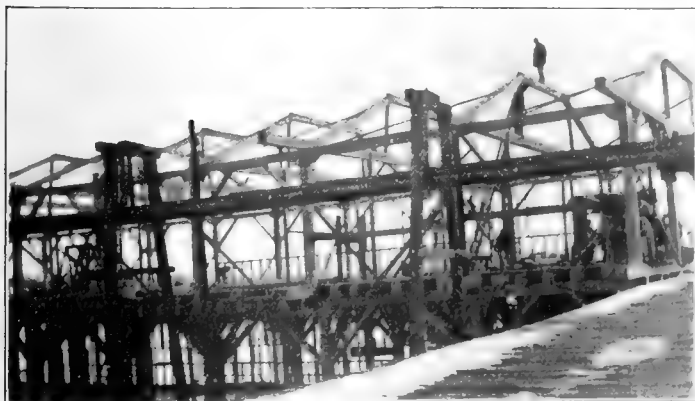
About ten months ago the Cartier-Holland Lumber Company was organized at Ludington, Mich., to do business in the manufacture and wholesaling of forest products, and to handle timberlands. The principals in this company are Charles E. Cartier and Edward M. Holland. From its inception the company has been successful in gaining recognition in the trade, both through the esteem with which the trade has always considered the name "Cartier" in connection with the manufacture of lumber, and because of the excellent reputation Mr. Holland has always enjoyed among the buyers of forest products.

A few months ago the entire plant was burned to the ground. Plans were immediately formulated to erect on the site of the old plant a modern mill, which would embody every feature that should be contained in an up-to-date northern lumber manufacturing plant. Authorities on mill construction were taken into consultation, and as a result of their efforts a model sawmill plant was mapped out. Work was begun in the early part of January, and the end of the month of February saw the entire outside structure of the mill completed.

The plant is of mill construction covered with corrugated iron, and special attention has been given to the matter of ventilation and lighting with the idea of insuring high-class work on the part of the sawyers, and further of eliminating as far as possible the hazard to workmen.

The construction of the lower floor and the arrangement of machinery is such that fire is almost impossible. A feature which will insure an abundance of light and ventilation is a cupola running the full length of the building, which will connect both ends of the filing room. Sufficient area has been allotted for the workmen on each machine so that they will not be cramped in the slightest in their operations.

The band sawing machinery which will consist of a single band mill and resaw, is being supplied by the McDonough Manufacturing Company of Eau Claire, Wis. The mill will be of the largest eastern type, namely, nine-foot wheels, with fourteen and sixteen-inch saw blades, while the resaw will have eight-foot wheels with twelve and fourteen-inch saw blades. The edger will be of the Pacific coast type with eighty-four-inch



NEW CARTIER-HOLLAND MILL, JANUARY 1—SKELETON CONSTRUCTION.

carriage, which will be equipped with cast steel knees, assuring light weight, and will be operated by twelve-inch shotgun feed. It will have the most modern type of hand set works with steam helper allowing for a set of a one-hundredth of an inch, thus insuring absolute accuracy of manufacture. The manufacturers of the mill claim that it will have a capacity of from 65,000 to 75,000 feet of mixed hardwoods and softwoods per day, and that it will be able to handle the most difficult material now imported into the western section of Michigan.

In addition, the yard is also being reconstructed. The sorting table is being placed in such a position that there will be ample facilities for assorting lumber with a minimum haul to the lumber pile. The entire product of this plant from the woods to the consumer is being looked after by the Cartier-Holland Lumber Company, and with the timber it holds and the splendid new mill equipment, it will be well qualified to give the consuming public the very best there is in lumber.

The Cartier-Holland Lumber Company wishes it to be known to its friends in the trade that it will be a pleasure to show visitors through the plant at any time they are in the vicinity of Ludington.

Linderman Company Has Beautiful Catalogue

The same idea of quality carried out in the manufacture of its products is noted in the recently issued catalogue of the Linderman Machine Company, Muskegon, Mich., manufacturer of the famous automatic dove-tail glue jointer. The paper is bound in stiff gray cardboard with an embossed cover showing a representation of the machine embossed in lighter gray and also the Linderman inscription. The very highest character of printing and engravers' work is carried out throughout the catalogue.

The contents include the introduction describing the factories, and giving the history of the development of the Linderman company. Then follows a minutely and beautifully illustrated description of the machine, in which is shown the application, operation, indirect value and adjustment. The construction is described in illustrated detail, cuts being shown of the frame, pressure bar, bearings, track and chain, cutters, taper-wedged mechanism, rip-saw and edger and evening device. The products of the machine are described, showing that quality and strength are added by gluing up according to Linderman methods. It has been demonstrated that a piece of wood jointed by the Linderman machine will invariably break not along the line of the joint, but in some other part of the wood when subjected to enough pressure. The application to the manufacture of door cores and panels, and many other lines of special work are amply described. The description closes with information as to the capacity of the machine and a technical analysis.

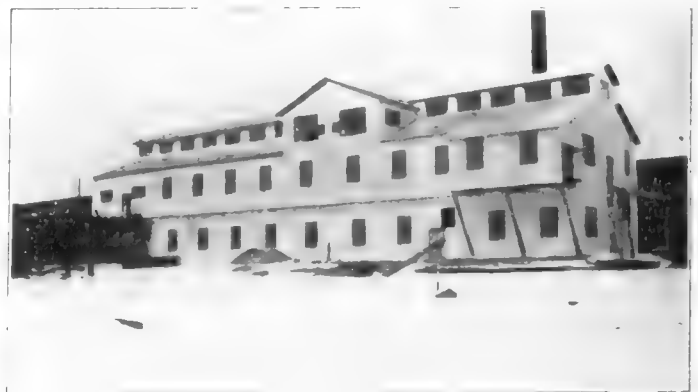
Arkansas National Forests Show Profit

The Ozark and Arkansas national forests in the state of Arkansas netted considerable cash profit, which will be apportioned among the different counties in which the forest lands of the government are located. The apportionment will be based on the revenue realized from the respective counties. These revenues were the result of sales which were equally divided between the two forests. The Ozark forest is located in the northern part of Arkansas and runs mostly to hardwoods, while the Arkansas forest is in the southern part and contains mainly short leaf pine stumpage.

Every sale of government timber is under the direct charge of a ranger or an assistant, who inspects every tree before it is felled. The felling must be done according to government instructions.

B. & O. Proposes Extensive Improvements

President Daniel Willard of the Baltimore & Ohio Railroad Company, announced extensive plans for improvements at a hearing before the Public Service Commission of Maryland last week, when the application of the company to issue \$63,250,000 in 4½ per cent convertible gold bonds, and \$57,500,000 in stock was tentatively granted. Mr. Willard stated



NEW CARTIER-HOLLAND MILL END OF FEBRUARY STRUCTURE COMPLETED.

that in addition to the \$24,500,000 in improvements nearing completion, the company intended to spend in the next few years beginning with June 30, about \$27,000,000 more. Of this total \$750,000 will go for Baltimore terminals and \$100,000 more for light and power. A double track bridge over the Alleghany river at Pittsburgh will cost \$2,500,000 more. The Chicago terminal betterments contemplated will call for an outlay of \$1,000,000, and the construction of fourteen and one-half miles of double track from Orleans Road to Little Capon, W. Va., will be the largest single item to be undertaken, requiring not less than \$7,000,000. Stations are to be erected at various places, and other improvements made.

Building Operations for February

Official reports from some fifty cities throughout the country, compiled by The American Contractor, Chicago, show a gain for February of 9 3/4 per cent in the aggregate, as compared with February, 1912; and the first two months gained 14 per cent as compared with the same months of the past year. The gains and losses were about equally divided in the list. Gains of over 100 per cent, for February, were made as follows: Akron, 221 per cent; Cleveland, 193; Indianapolis, 484; Newark, 128; Pittsburgh, 112; St. Joseph, 108; Seattle, 209; Sioux City, 186; Syracuse, 225. For the two months the largest percentage of gain was scored by Indianapolis, 244, and Sioux City, 294. Particulars will be found in the following tables:

City	February, 1913.		February, 1912.		Per Cent	
	Cost	Gain.	Cost	Loss.	Gain.	Loss.
Akron	\$ 188,165		\$ 58,475		221	...
Atlanta	516,681		402,337		28	...
Baltimore	723,135		532,670		35	...
Buffalo	347,000		1,228,000		70	...
Cedar Rapids	106,000		115,000		8	...
Charlottesville	136,855		357,410		62	...
Chicago	4,668,800		3,777,100		23	...
Cleveland	1,142,725		389,920		193	...
Columbus	225,890		210,251		7	...
Denver	213,600		446,500		52	...
Duluth	83,500		114,630		27	...
Fort Wayne	72,000		87,800		17	...
Grand Rapids	142,500		157,555		9	...
Harrisburg	42,575		95,875		55	...
Hartford	114,560		186,085		38	...
Indianapolis	479,653		82,040		484	...
Kansas City	488,000		999,110		51	...
Los Angeles	1,693,582		2,152,963		21	...
Louisville	553,320		999,860		44	...
Manchester	26,300		57,380		54	...
Memphis	218,475		87,121		59	...
Milwaukee	518,856		450,026		20	...
Minneapolis	361,590		330,855		9	...
Newark	1,094,009		478,432		128	...
New Orleans	387,906		149,045		93	...
Manhattan	9,160,535		6,977,646		31	...
Brooklyn	2,294,850		1,894,467		21	...
Bronx	2,422,185		1,987,840		21	...
New York	13,877,570		10,859,953		27	...
Norfolk	317,359		335,088		5	...
Oakland	594,814		518,572		14	...
Omaha	236,988		219,195		8	...
Philadelphia	1,414,645		2,029,385		30	...
Pittsburgh	769,161		362,147		112	...
Portland, Ore.	690,240		1,128,176		38	...
Rochester	463,024		644,676		28	...
St. Joseph	40,115		19,235		108	...
St. Paul	218,686		269,994		19	...
San Antonio	127,390		171,310		25	...
San Francisco	1,298,450		1,764,252		26	...
Scranton	69,730		144,790		51	...
Seattle	1,468,560		475,940		209	...
Shreveport	97,129		65,905		47	...
Sioux City	93,650		32,750		186	...
South Bend	8,600		5,370		60	...
Syracuse	444,200		136,080		225	...
Toledo	466,280		236,917		71	...
Wilkes-Barre	22,520		113,305		80	...
Worcester	181,502		112,525		61	...
Total	\$37,414,160		\$34,084,505		9 3/4	...

Forest Products Exhibition in Pennsylvania

The Pennsylvania Forestry Association is planning to give a Forest Exhibition in Horticultural Hall, Philadelphia, during the week from May 19 to 24, inclusive. The association has the co-operation of the United States Forest Service, the Pennsylvania Forestry Department, Pennsylvania State College, Philadelphia Commercial Museum, University of Pennsylvania, Chestnut Tree Blight Commission of Pennsylvania, the National Reclamation Service, Philadelphia Lumbermen's Exchange, American Association of Nurserymen, Pennsylvania Railroad, American Wood Preservers' Association, and various civic and social organizations.

From this it will be seen that the plan is not merely to give an exhibit on forestry, but also on its kindred subjects, in other words, to make the exhibition comprehensive as far as the field of forest products is concerned.

Most of the above named associations and organizations are planning some kind of an exhibit. The exhibition will not be on a commercial basis, but is given from a standpoint of education and instruction.

Besides the subjects set forth, there are a number of others which the Pennsylvania association is endeavoring to touch upon by means of exhibits, such as wood pulp, manufacture of paper, the various uses of sawdust, spraying and other apparatus, and by-products of the wood-working industry.

Hardwood Lumber Directory

The National Hardwood Lumber Association has just issued from its Chicago office the new Hardwood Lumber Directory, just off the press. The directory is volume sixteen and dated February, 1913. It contains

interesting data as to what the association has accomplished during the last six months, and what it expects to accomplish in the near future.

The character and working arrangement of the new reporting department are duly described in the directory. This is undoubtedly the most notable feature of the issue.

The directory also contains an official list of the membership to date, including the names of 102 new members who have joined since the annual meeting last June. This list shows not only the bulk gain of the association, but also how rapidly the association has gained favor in various important markets. Progress in Canada has been of an appreciable character.

Extensive Timber Deal in Wisconsin

An important timber deal was consummated last week between the Edward Hines Lumber Company of Chicago and the Atwood Lumber and Manufacturing Company of Park Falls, Wis. Through this deal the Edward Hines Lumber Company has become owner of what is probably the largest tract of standing timber held by one company in the state of Wisconsin. According to what are classed as conservative estimates, the stand includes 600,000,000 feet of timber. Of this, one-third is in counties east of Park Falls, while the remaining two-thirds are situated in the counties of Ashland, Iron, Rusk, Oneida and Sawyer. The concerns involved in this deal, besides the Edward Hines Lumber Company as purchaser and the Atwood Lumber and Manufacturing Company, are the Mississippi Logging Company and the Chippewa Log and Boom Company. The deal, besides timber, involves the Atwood sawmill and railway. April 1 is the date set for the transferral of the holdings. The Hines company will, after that date, immediately begin preparations for the operation of the mill at Park Falls. This mill has a capacity of from 175,000 to 200,000 feet daily and the Hines company is planning to run it at least eleven months out of the year. The mill at Park Falls will be stocked from the timber east of Park Falls and about one-half of that lying west of that point. The balance will be manufactured at the plant at Hayward, Wis.

Big Cypress Deal in Florida

On Feb. 12, J. C. Turner, head of the J. C. Turner Lumber Company of New York City, purchased 100,000 acres of high-grade cypress timber situated in Florida. James D. Lacey & Co. of Chicago acted as mediary through which the deal was consummated. This deal represents the transferral of the largest single body of standing cypress in the United States.

Messrs. Burton and Swartz of the Burton & Swartz Cypress Company, Burton, La., large operators in cypress, are associated with Mr. Turner in this deal. The purchase is in the nature of an investment as Mr. Turner and his associates are not planning to operate in the near future or until such time as their already extensive cypress holdings are cut out.

This purchase, together with a purchase consummated a short time before, as noted in the last issue of HARDWOOD RECORD, gives Mr. Turner the standing as the largest individual owner of cypress timber in the country. The two deals referred to were consummated after an extended trip through southern points on the part of the principal purchaser.

Building Conditions in an Ohio City

While the weather remains good and suitable for building at Cincinnati, O., still contractors hesitate to start work except in a few cases, preferring to wait a few weeks for weather to settle. The result of this inactivity among the building trades has been a light demand for millwork. Planing mills, however, have been very busy during the lull making up stock sizes for spring business, and will continue right along up to capacity, as the run on special work for current business continued so long last season that all plants were completely sold out and had little time to make up stock. They have done considerable more buying of this class of stock this year than for several years. There is every indication of a big year in the building field. The regular "home building" companies that build for the market are very active this year, and then there are one or two additions of subdivision operators who expect to operate on a large scale in this season.

In addition to this speculative building all architects are very busy and many contracts for good sized work have been let for an early start, with much more to follow. The general opinion is that there will be plenty of work for the millwork dealers this year. All of the popular finishes are to be used as usual, and yellow pine and cypress will be much in evidence. The demand for hardwoods is very strong even in the cheaper class of homes, which will result in much oak being used, but owing to the high price of this class of finish and the success that has been attained by the use of red gum for interior finish will make gum loom up stronger than ever before.

Lumbermen's Underwriting Bulletin

Bulletin No. 61, issued by the Lumbermen's Underwriting Alliance of Kansas City, Mo., analyzes the much talked of reports on the "arson trust," which it has been shown exists pretty much throughout the country. The bulletin points out a very striking difference between the methods pursued by the average stock company as contrasted to the methods of the Alliance. The remedy advocated by the municipal fire commissioner of New York City, in dealing with this question, is that the fire insurance companies should stop issuing policies without a pre-

vicious inspection of the property, a well-kept record is sought and an investigation of the cause of the fire.

On the other hand, the Alliance is for its subscribers, no liability, except that an investigation of the character of the property and the owner.

After a close analysis of the question of the existence of an arson trust the bulletin suggests that as a matter of justice the public hold in abeyance its judgment as to the relation between the heads of the large stock companies and those directly connected with the business of arson.

The bulletin then says that lumbermen engaged in producing similar finished product from similar raw material have comparable fire risks. The risks of lumbermen as a whole are happily situated at a safe distance from the operations of the arson trust, and from the congested centers of great cities, constituting the conflagration hazard. They are not often exposed by close proximity of risks other than their own. The bulletin then raises the question as to why the lumberman should surrender the natural advantage of isolated location already theirs by joining with those less fortunately situated, and by contributing to the losses of others less careful than they, to the losses caused by criminal intent, to the losses caused by the necessary exposures of great centers and to vast conflagration, when the property of lumbermen is not subject to any of these hazards.

Every lumberman whose risk is situated as before described, and who is buying his insurance from public companies is not only contributing to the losses from causes just named, to which his plant is not subject, but is bearing his share of the overhead charges and expenses which stock companies seem to find it impossible to avoid. The fundamental cost of insurance is fire loss for which policies are liable. The only way that this first cost can be reduced is by preventing fires. The Lumbermen's Underwriting Alliance, as it is well known, is accomplishing toward this end more than has been done or is being done at present in any other way.

It would seem that insurance under the Alliance plan is at the lowest cost at which it can be produced other than by a still further reduction in fires. Last year, the eighth and best year of the operation of the Alliance, it saved fifty-eight per cent of its policy carriers' earned premiums. This means fifty eight per cent of the premiums of the Alliance figured at the Alliance rates, which would be a much larger per cent of the premiums figured on stock companies' rates when the Alliance entered the field.

The only fire of any consequence since December destroyed the sawmill and boiler house of the Alexandria Lumber Company at Alexandria, La., with a loss of about \$64,600. This was the first sawmill fire among the patrons of the Alliance in eight months, and the third in fifteen months. The loss ratio of all other plant divisions has also decreased in a marked degree.

The bulletin points out several lessons as gained from the Alexandria fire. The cleaning crew should be gotten into the mill as soon as possible after the departure of the day workmen. The mill should be equipped with plenty of full water barrels with buckets in or above them. The hose should be tested frequently, and should be already connected and muzzled, and of a size that the watchman can handle. Sand buckets should be supplied to smother insipient blazes from hot boxes. The cut-off valves should be located in the open, where it is easily accessible and plainly visible. It has been proven that outside hydrants fifty feet from the mill are too close to operate the hose from them without burning, and hence on being abandoned they tap the water pressure. Every plant should have at least two sources of steam supply.

Recent Mahogany Sales at Liverpool

There were representatives of numerous large companies present at the February sales of mahogany in Liverpool. The catalogues at these sales included a large percentage of inferior woods with the result that any good logs fully maintained reasonably high prices.

Advices from Liverpool are to the effect that there is no immediate prospect of any reduction in price, and the same advices suggest that buyers are not saving anything by holding back their orders and, in fact, would work to their own advantage by buying now.

Consumption of Railway Ties in Canada

In 1912 there were 7,341,649 railway ties consumed in Canada; the year before about 500,000 less, and in 1907 there were 5,200,000 ties consumed. The average cost per tie in 1912 was 44.7 cents; in 1911, 43.8 cents, and in 1907, 36.7 cents. This represents an increase of 2.18 per cent in the average cost of ties from 1907 to 1912.

Among the woods used are cedar, oak, hemlock, spruce, fir, tamarack, pine and chestnut. Tamarack was by far the leader, there being over 1,000,000 ties used made of this wood, while cedar, the next, shows only \$75,000. Pine ranked next; oak, third; hemlock, fourth, and chestnut, fifth.

The oak tie is by far the most expensive tie used in Canada, pine being second; tamarack, third; cedar, fourth; according to the report.

The Fork of a Tree Never Grows Higher

Some people through careless observation believe that the fork of a forest tree will gradually grow higher from the ground. If they would investigate it would be found that the forks and "heads" of fruit trees are at exactly the same point where they were when first noted. The state

forester in inspecting locust and catalpa groves throughout the state has

that have formed forks below fence post length, believing that in years the fork would grow up and a fence post could be cut below the fork. This erroneous belief is the cause of much of the delay and neglect of pruning in early life of street and roadside trees.

It is a fact that the side branches of a tree will always remain at the same distance above the ground. The side branches of some trees, such as the elm, usually continue to grow upward, while those of other trees such as the maples incline upward when young and as the tree grows older the weight of the branches gradually brings it to the horizontal. The latter often makes the removal of large branches necessary, which not only spoils the symmetry of the tree but usually starts decay which soon kills the tree.

No street or roadside tree should be permitted to form a fork below ten feet and all of the side branches to the same height should be removed so that they will shade the adjacent crop less. If this is done the tree in time will grow a saw log below the branches. Every farmer who has a tree growing along his fence should see to it that it is properly pruned before springtime comes. A book on the planting, care and pruning of street and roadside trees may be obtained free by writing to the state forester at Indianapolis.

A woodlot of thirty-five acres, five acres of which had at one time been partially cleared, was recently visited because of this popular idea. Over the cleared area many walnut trees came up, which now average from three to six inches in diameter. However, the trees are not close enough for natural pruning to be operative and as a result the trees have headed very low and a majority below seven feet. The owner has held the tract for thirteen years hoping to grow a walnut forest. His trees are too far apart for natural pruning and too old for artificial pruning and he is forced to abandon a cherished idea because he thought the "tops" of the trees would gradually grow up.

There are many who share with this man the same idea and the publication of this bulletin will do much good.

Returns to St. Louis

The R. M. Morris Lumber Company is the style of a new corporation at St. Louis, Mo. This corporation is a culmination of a number of changes affecting the affairs of the former Morris Lumber Company of St. Louis.

Sometime ago this firm moved to Chicago, but it has now discontinued the connection which brought it North, and has returned to its former location.

R. M. Morris is president of the company, which will handle hardwood and yellow pine. The offices are on the fourth floor of the Wright building. The R. M. Morris Lumber Company will handle the stock of the Triangle Lumber Company, Clifton, Ark.; the Sterling Lumber Company of Bastrop, La., and J. H. Allen & Co., Minter City, Miss.

J. D. Scroggin was engaged on Mar. 5 as the Chicago representative of the R. M. Morris Lumber Company.

Hardwood News Notes

< MISCELLANEOUS >

E. W. Sparrow, president of the Lansing Company, Lansing, Mich., died recently.

The Advance Lumber Company, Cleveland, O., has increased its capital stock from \$131,350 to \$500,000.

The Arkansas & Indiana Lumber Company of Clarksville, Ark., has opened a lumber yard at Ozark, Ark.

The Below Lumber Company has been incorporated at Mansfield, Wis., with an authorized capital of \$10,000.

A new incorporation at Gregory, Miss., is the Attalla Lumber Company, with a capital stock of \$75,000.

The King-Singer Company has been incorporated at Washington, D. C., with a capital stock of \$50,000. The company will manufacture furniture.

The plant of the Kansas City Hardwood Flooring Company, Kansas City, Kans., was damaged by fire, February 23, the loss being estimated at \$45,000.

The J. J. White Lumber Company has commenced operations at its new mill in Columbia, La., which is understood to represent an investment of \$165,000.

The Standard Lumber Company has been organized at Louisville, Ala., by A. J. Rombach and G. D. Goodwin of Columbus, Ala., and D. G. Holcomb, Jr., of Louisville.

Curtis Bros. & Co., manufacturers of sash, doors and blinds, Clinton, Ia., contemplate the erection of a large modern factory to take the place of the present structure.

A new furniture manufacturing enterprise has been organized at Chicago styled the Merchants' Furniture Company, by George W. Wilbur, Samuel E. Dale and LeGrand W. Peter.

It is announced from Escanaba, Mich., that the new factory of the Bird's Eye Veneer Company, recently incorporated at that place, will be ready for occupancy by the first of April.

The Concordia Land & Lumber Company at Jeffris, La., started operations on Mar. 1, after being idle for several weeks. The plant was shut down on account of poor logging conditions.

The Burgaw Lumber Company, Inc., has been incorporated at Norfolk, Va., the officers being: W. R. Tolleth, president; J. M. Marshall, vice-president; R. M. Brown, secretary and treasurer, all of Norfolk.

The D. W. Atchison Lumber Company has been formed at Chattanooga, Tenn., with a capital of \$10,000, those connected with the enterprise being A. P. Conklin, D. W. Atchison, Paul Campbell, C. S. Coffey and R. A. Cogswell.

The Wabash Hardwood Company of Terre Haute, Ind., and Memphis, Tenn., extensive hardwood dealer and exporter of timber and lumber, has established a branch office in Beaumont, with L. L. Boone, Jr., as its representative there.

The Straight Creek Lumber Company has been organized at Barbourville, Ky., and has purchased the standing timber in Bell and other southeastern Kentucky counties from the Continental Coal Company. It is estimated that ten years will be required to get off the timber.

The factory and machinery of the Mergenthaler-Hortons Basket Company of Paducah, Ky., was recently purchased by the Lucas Land & Lumber Company of that place, the consideration involved being about \$50,000. The purchase was made by the Lucas company with the idea of providing facilities for the manufacture of boxes from its low-grade lumber. It is well equipped and well located. The capacity of this plant is about five times that of the Lucas box plant which was destroyed by fire last December.

CHICAGO

J. O. Wetherbee of the J. O. Wetherbee Company, Boston, Mass., was a Chicago visitor, Mar. 10.

The Union Show Case Company of Chicago, Ill., recently filed an involuntary petition in bankruptcy.

M. J. Fox, manager of the Von Platen Lumber Company's operations at Iron Mountain, Mich., was in Chicago several days of last week.

Harry Schadt, secretary of the Hyde Lumber Company of South Bend, Ind., spent several days of last week in Chicago.

Ralph May of May Brothers, Memphis, Tenn., spent several days with the local trade about a week ago.

J. T. Edwards, manager of the Medford Veneer Company, Medford, Wis., was in Chicago in conference with his local representatives a week ago.

H. D. Leavitt, vice-president of the Oconto Company and manager of its operations at Oconto, Wis., spent a few days of last week in this city in conference with the local office.

The Lumbermen's Club of Chicago gave a highly successful stag and smoker in the club rooms on Friday evening, Feb. 28.

J. C. Turner of the J. C. Turner Lumber Company, New York City, accompanied by his wife, reached Chicago on Feb. 26, having come from French Lick, Ind.

HARDWOOD RECORD has just been advised that the Gaylord Motor Car Company has closed a contract with the Michigan Hardwood Manufacturers' Association, for a car of special design for the use of the chief of the forest fire protective department, Charles F. Hickok.

NEW YORK

The southern railway and steamship lines have announced that, effective March 11, they will eliminate free lighterage within the New York lighterage limits. This will amount to about \$1.25 per M on shipments from Southern Pacific milling points.

Charles W. Booth, for many years identified with the domestic and foreign hardwood trade, died at Bayonne, N. J., Feb. 22 of heart disease. Mr. Booth was a member of the firm of Wm. Booth & Bro. of Manhattan. He is survived by a widow and three children.

The C. C. Mengel & Brother Company has opened a sales office in the Aeolian building, West Forty-second street, Manhattan. S. C. Strock will be in charge. This company is one of the foremost importers and exploiters of mahogany in the world.

Charles Milne of the Milne Brothers Company, wholesale hardwood specialist, 18 Broadway, left for Washington with the Essex Troop, New Jersey, which appeared in the inaugural parade.

G. J. Howie of Wright, Graham & Co., Glasgow, Scotland, who has been spending some time at hardwood manufacturing points in the States, sailed for home during the past fortnight.

E. L. Edwards of the Edwards Lumber Company, Cincinnati and Dayton, O., sailed from New York Feb. 27 on the steamer "France" of the French line for a brief trip to Paris.

Gustave A. Farber, London representative of Russe & Burgess, Inc., hardwood manufacturers and exporters of Memphis, sailed for home last week.

W. S. Harlan of the Jackson Lumber Company, Lockhart, Ala., returned home after a few days spent in town visiting the local representative. Mr. Harlan was optimistic over the business outlook.

T. Thompson has opened an office in the Aeolian building and will conduct a wholesale mahogany import business.

A. B. Ransom of Nashville, Tenn., spent a couple of weeks in town re-

cently. Mr. Ransom finds hardwood conditions generally strong with firm prices and a scarcity of good grades.

The American Veneer Company, formerly at Kenilworth, N. J., is again doing business at a new location in Hoboken, N. J. The new plant is of much larger capacity and facilities for handling business are vastly increased. The company has acquired the plant and taken over the business of Joel H. Woodman.

The Emporium Lumber Company interests have organized the Emporium Forestry Company, a New York corporation which is now owner of 86,000 acres of land in New York state and mills and railroad operations formerly owned by the Emporium Lumber Company. The stockholders and officers of the Emporium Forestry Company are practically the same as of the Emporium Lumber Company. The lumber products of the Emporium Forestry Company will be marketed by the Emporium Lumber Company. The operations of the Emporium Lumber Company at Keating Summit and Austin, Pa., are expected to be completed this spring and the offices of the company will be moved to Utica, N. Y., which will be closer to the operation at Galeton, Pa., and more convenient to the principal trade of the company.

BUFFALO

On May 1 the headquarters of the Emporium Lumber Company will be at Utica, N. Y., with the Buffalo office reduced in size and some of the Pennsylvania offices discontinued. President W. L. Sykes has not decided whether or not he will remove to Utica this spring. Utica was selected because it is a sort of half-way point between the mills of the company in the Adirondacks and Vermont on the one side, and Austin and Galeton, Pa., on the other.

The Buffalo dealers who are in Michigan and Wisconsin hardwood trade are finding prices very high this winter, and they would go elsewhere for supplies if they knew where to find them. There is now no hardwood coming out of Canada, so that everything has to come from the South or the Southwest, if the lake district will not produce it at paying prices. Of course New York, Pennsylvania and New England are doing considerable in hardwoods.

The Setter Brothers Company, a lumber and veneer manufacturing plant of Cattaraugus, has entered into an arrangement to move the business to Jamestown, and it is expected that the business will become part of a new \$100,000 corporation being formed to manufacture furniture veneers. The name of the new plant and its location are not yet disclosed.

F. M. Sullivan reports excellent winter trade at the Arthur street yard, much of it in soft gray elm and brown ash. Stocks of oak and maple are also being replenished.

A. J. Chestnut has returned from a short trip to Florida. He reports that Jacksonville impressed him as favorably as any other town he visited, but he thinks that the North is the section to live in.

Hugh McLean left for the southern mills of his company early this month, planning to be away for three weeks and to spend some days in Florida before coming home.

Anthony Miller finds the hardwood trade very fair for March, although the presence of much snow makes it difficult for his men to handle all the incoming lumber now arriving.

I. N. Stewart & Bro. have been moving a good amount of oak and poplar this month and are looking to see the present good inquiry for hardwoods still more improved soon.

Horace F. Taylor of Taylor & Crate, Inc., is going South right away to look after the interests of the company beyond the Ohio. The office reports business as never better. The new yard will be developed slowly as soon as the weather permits and will have a fireproof office building.

O. E. Yeager and J. B. Wall left early this month for a trip to Mt. Clemens, where they will spend about two weeks. Mr. Wall has been appointed a member of the finance committee of the International Congress of School Hygiene, which will be held in this city in August.

F. T. Sullivan has returned from a business trip to New York and Philadelphia and is now busily engaged in making plans for lake shipments this summer to the local yard of H. H. Salmon & Co.

M. M. Wall and W. L. Sykes were among the Buffalo lumbermen who took in the inauguration of Woodrow Wilson. They also attended the wholesalers' convention at Atlantic City.

At the annual election of the Buffalo Lumber Exchange held Mar. 8, A. W. Kreinheder was elected president, John McLeod vice-president, and John S. Tyler secretary and treasurer, with the following board of directors: H. L. Abbott, W. P. Betts, John F. Knox, Anthony Miller, W. A. Perrin, James N. Scatterd, John S. Tyler, A. W. Kreinheder, J. M. Briggs, Peter McNeil and John McLeod. Satisfactory reports were made by the secretary and treasurer.

PHILADELPHIA

Daniel B. Curll testifies to progressive trading with inquiries multiplying. Unfortunately he is obliged to turn down orders for some of the woods unusually scarce at this time. His four portable mills near Butler, Tenn., and the one at Fort Blackmar, Va., are rushed to the limit getting out hardwoods and hemlock.

The W. R. Taylor Lumber Company reports business increasing right along. W. R. Taylor, who is at present on a business trip through New York and New Jersey, will return in a few days before making an ex-

tensive trip through the southern lumber camps as far as Florida.

Lukens Brothers, who were among the oldest and best-known retailers of this city, have disposed of their yard and joined the ranks of wholesalers, with office at 808 Perry building.

W. J. Mingos of Mingo & Rutter reports unlimited business with promise good for rest of the year. The only trouble is where to look for the goods.

J. E. Troth, president of the J. S. Kent Company, says the month of February is regarded as between seasons, and a slight lull in trading is nothing unusual, but things are moving along nicely and orders can be booked for almost anything that can be promptly delivered.

Ralph Souder of Hallowell & Souder reports a satisfactory business. They are not forcing their salesmen at this time as they wish to catch up with the shipping of accumulated orders. The outlook is very encouraging.

W. A. Jackson of the Jackson-Wyatt Lumber Company recently returned from a stock hunt in North and South Carolina. W. H. Wyatt is there now on the same errand. "There is no trouble booking sales," he says, "the gathering of material is where the hitch comes."

The Baldwin Locomotive Works recently booked an order from the Baltimore & Ohio Railroad for ninety locomotives, costing \$2,325,000; also an order for five engines from the Missouri Pacific Railroad.

The Pine Tree Lumber Company, Sunbury, Pa., capitalized at \$5,000, was incorporated under Pennsylvania laws, Feb. 20.

The East Falls Lumber Company, this city, obtained a charter under Pennsylvania laws, Feb. 20, with a capital of \$10,000.

The Warren Table Works, Warren, Pa., was chartered under Pennsylvania laws, Feb. 21. Capitalized at \$175,000.

◀ PITTSBURGH ▶

J. N. Wollett, president of the Aberdeen Lumber Company, made a very successful buying trip to the Southwest lately and got under way a large amount of cottonwood and gum which he sent up the river by barge. Two of these barges were unloaded last week at Louisville and another one will be distributed from a Mississippi river town shortly.

The Manufacturers' Lumber Company is a new concern here organized by A. E. Murphy, well known in lumber circles in Pittsburgh, and C. M. Pomeroy and E. J. Flautt. The company will have offices in this city.

The Pittsburgh Industrial Development Commission last week landed its fourteenth plant in fourteen months for Greater Pittsburgh. This was the Fulton Iron Company, which has secured a four acre site at Cheswick, a few miles up the Allegheny river. It will employ 150 men.

The West Virginia Lumber Company reports business good and prospects fine. It is doing a splendid business this year in making boats and barges for the coal trade at its plant in northern Pennsylvania.

The Woodlawn Lumber Company is a new concern at Woodlawn, fifteen miles down the Ohio river, where the \$10,000,000 plant of the Jones & Laughlin Steel Company is located. Its members are John F. Haines, E. M. Ridenour and W. J. Harris.

J. W. Semans and Thomas B. Palmer, Uniontown, Pa., have bought 2,200 acres of timberland in Somerset and Westmoreland counties, Pa., for about \$80,000. The work of cutting will start shortly. Most of the lumber will be hardwood.

Joseph J. Linehan is busy these days marketing the stocks of the Mowbray & Robinson Company of Cincinnati and reports from his office in the Fulton building that plenty of good business is in sight.

The Pittsburgh Wood Preserving Company is arranging to build another plant at Reed City, Mich., for the treatment of ties. It already has two plants near Conneville, Pa., and Orrville, Ohio.

C. E. Breitwieser & Co. report their hardwood business first class. Frank Smith of this concern was in West Virginia last week making new connections for lumber.

President W. D. Johnston of the American Lumber & Manufacturing Company went to the western coast last week on a business trip. Mr. Johnston recently returned from a trip to the Bermudas. He thinks that business prospects in lumber circles are very encouraging.

◀ BOSTON ▶

Frank F. Carpenter, president of the Frank F. Carpenter Lumber Company, Providence, R. I., died late in February in that city after an illness extending over three years. He was confined to his bed about four weeks. He was fifty-eight years of age. Mr. Carpenter had been in the lumber business since leaving school. He entered business for himself about four years ago. He is survived by a widow.

The National Woodworking Machinery Company, of Manchester, N. H., is reported to have been taken over by Joel F. Sheppard of Dover, N. H., who will remove the business to the latter city.

Recent visitors to this market were:

G. F. Stocker, representing the J. J. Newman Lumber Company, Scranton, Pa.; C. H. Carroll, representing the Robinson-Edwards Lumber Company of Burlington, Vt.; C. R. Gardiner, of the A. J. Chestnut Lumber Company, Buffalo, N. Y.; A. L. Underwood, second vice-president of the J. C. Turner Lumber Company, New York; L. C. Litchfield, representing the Montgomery Lumber Company, New York; and Edwin D. Walker, treasurer of the John M. Woods Lumber Company, Memphis, Tenn.

The Fletcher Lumber Company, Springfield, Mass., has been incorporated

with a capital of \$25,000. The incorporators are George W. Stone, William A. Fletcher and Frank A. Bradner.

The S. J. Lumber Company, Portland, Me., is an incorporated company with a capital stock of \$10,000. The incorporators are Robert B. Jordan, Scarborough, Me.; Sidney St. E. Thaxter and Roscoe Holt, of Portland.

◀ BALTIMORE ▶

The annual meeting of John H. Heald & Co., Inc., Lynchburg, Va., manufacturers of tanning extracts and coloring matter from chestnut and other woods, was held here on Feb. 20 and 21. At the following officers being re-elected: President, Charles E. Heald; vice-president, John M. D. Heald of Baltimore; secretary, Charles E. Heald, and treasurer, H. T. Thornhill. The factory of the corporation uses about fifteen cars of chestnut a day, consuming also chestnut oak, black oak and Spanish oak. The yearly reports read at the meeting showed the company to have been very successful. J. M. D. Heald is of the firm of Price & Heald, the hardwood wholesalers and exporters here.

Among the visiting lumbermen in Baltimore recently were J. S. Kent of the J. S. Kent Company of Philadelphia; H. E. Sanford of Sanford & Treadway, New Haven; Mr. Morrison of the Boice Lumber Company, Inc., of Richmond, Va., and C. L. Shoffner, general manager of the Shoffner Lumber Company of Cleveland, O. Messrs. Kent and Sanford were on their way home from the mills of their respective companies in the South, and stated that the plants had plenty of orders on hand and were facing a most promising prospect. Similar reports about trade conditions were made by the other two visitors.

Baltimore is to have a \$1,000,000 belting factory, the American Belting Company of this city having been incorporated on Feb. 28 at Dover, Del., with a capital stock of that amount, subscribed largely here. The incorporators named are Harry C. Lawrence, 2347 Eastern avenue, secretary of the Maryland Belting and Packing Company; William M. Purdy, a machinist living at 1006 Federal street, and Charles T. Neepier of Catonsville, a suburb. It is stated that Baltimore will soon have the largest factory for the manufacture of stitched canvas and cotton duck belting in the world. The plant will cover from three to five acres and employ 500 persons. The Maryland company is to be merged with the new corporation, it is stated.

◀ COLUMBUS ▶

The most important happening in lumber circles in the past few weeks was the passage by the Ohio General Assembly of the Green compulsory workmen's compensation bill. The bill provides that every individual, firm or corporation which employs five or more people must pay into the state premiums which are to be used for disability and death of employees. The schedule of benefits for death range from \$1,500 to \$3,500; for temporary disability two-thirds of the average weekly wages is to be paid, provided it does not exceed twelve dollars, for a period of six weeks. For permanent disability the employee is paid two-thirds of his weekly wages for life, provided it does not exceed twelve dollars per week. Many lumbermen objected to the compulsory bill, but since it does not become effective until January, 1914, sufficient time will be given to work out the details.

The Collinwood Lumber Company of Collinwood, O., has filed papers with the secretary of state increasing its capital stock from \$20,000 to \$40,000.

Papers have been filed with the secretary of state decreasing the capital stock of the Compressed Wood Preserving Company of Cincinnati, O., from \$200,000 to \$50,000.

After a short illness in which his serious condition was not realized, Fred W. Hubbar, secretary of the Kilbourne & Jacobs Manufacturing Company of Columbus died at his late residence, 447 East Broad street, of blood poisoning. He was also president of the Sun Manufacturing Company of Columbus. He comes from one of the oldest families of central Ohio and was well known in business circles. He was fifty years of age and is survived by a widow, four children, mother and a large circle of friends.

The Atlas Coopersage Company of Fremont, O., has moved to Fostoria, O., and will start operations in the new plant March 20. Ralph Morris is superintendent of the concern.

R. W. Horton, sales manager for the central division of the W. M. Ritter Lumber Company, says the hardwood trade is strong in every way. Both factories and yards are buying well. Yard stocks are slightly larger in preparation for the spring building trade. Factories are buying only what is needed for immediate consumption. Prices are firm and inclined to advance. Dry stocks in every locality are generally short. Mr. Horton recently returned from a business trip to Rochester, Syracuse and New York City.

J. A. Ford of the Imperial Lumber Company reports a good demand for hardwoods with stocks growing scarcer. Prices are well maintained. Mr. Ford recently returned from a business trip in the lumber districts of West Virginia.

Manager Hodil of the Virginia Lumber Company says trade is good, especially in the lower grades of hardwoods. He believes that the activity will continue in all branches of the trade. Mr. Hodil recently returned from a business trip in northern Ohio.

John R. Gobey of John R. Gobey & Co., says trade has been fair and prices are strong; buyers apparently are waiting on the weather, although

no weakness is apparent. Retail stocks are slightly increasing.

Secretary Benbow of the Sowers-Leach Lumber Company says there is a fair trade, especially in northeastern Ohio. Prices are holding up well and his company reports a fifty per cent gain in orders so far this year over last year.

W. B. Sissons, sales manager for the Sowers-Leach Lumber Company, recently returned from a business trip in the South.

F. Everson Powell of the Powell Lumber Company says there is a fair volume of business in the hardwoods. Prices are high and are expected to continue so.

◀ TOLEDO ▶

"Business continues good with us and we have all the orders we can well take care of," was the report of the Toledo Carriage Woodwork Company.

"We already have on our books all the orders we will be able to take care of this year," said Manager Roberts of the Big Four Hardwood Company, speaking of the piano case manufacturing end of the business.

The J. M. Skinner Bending Company is building an addition to its plant at the intersection of Broadway and the Wabash railroad. The new building will be fifty-five feet in length and twenty-five feet wide and will cost about \$2,500. This concern is one of the oldest manufacturing plants in the city and the new addition will be used as a wheelbarrow manufacturing plant.

The Yesbera Manufacturing Company is running full time and capacity turning out store fixtures. This concern says that, judging from inquiries which are flooding in from all portions of the country, it is entering onto the biggest year of its history.

Many investment structures and additions to factories are now in the course of construction or in the hands of architects, ranging from twenty-one-story office buildings to two-flat and residence structures. Last year was the banner building year for Toledo and the coming season will leave it far in the rear if inquiries and plans are to be trusted. Toledo is to have a civic center the coming summer which will mean the expenditure of practically a million dollars.

◀ INDIANAPOLIS ▶

W. W. Knight, president of the Long-Knight Lumber Company, and Mrs. Knight are in Atlantic City.

John J. Madden of Thomas Madden Son & Co. has bought a manufacturing plant and will engage in the manufacture of a line of furniture.

Millwork is to be manufactured by the Builders' Mill Work Company, organized and incorporated at Laporte with an authorized capitalization of \$15,000. Those interested in the company are Charles O. Larsen, Frank A. Larsen, Emil Danielson and G. Edward Caul.

Building operations in the city during February embraced 311 permits aggregating \$479,653 as compared with 136 permits aggregating \$82,040 issued in February, 1912. Last month's operations established a new record for February.

An offer of \$307,000 for the plant and business of the T. B. Laycock Manufacturing Company, bed manufacturer, has been submitted by the general creditors to the receiver of the company. The court has taken the offer under advisement.

The Crawfordsville Furniture and Lumber Company has been organized at Crawfordsville to conduct a hardwood and furniture manufacturing business. It has been incorporated with an authorized capitalization of \$75,000 by Edward A. Sterzik, Frank C. Evans, Howard Smith, Preston O. Rudy, Henry E. Greene and Lawrence E. Devor.

The Indiana legislature has passed a public utilities law, said to compare favorably with the Wisconsin measure. It also has under consideration a workmen's compensation bill and a bill prohibiting women working more than nine hours in any one day or to exceed fifty hours in any one week.

◀ MEMPHIS ▶

The Bellgrade Lumber Company is making arrangements for developing its timber resources at Isola, Miss. It is building a tram road and mill shed. This is being done so that, when the remainder of its timber at Belzoni has been cut it may remove its machinery and logging equipment and install this without loss of time. The company owns 3,500 acres of timberlands near Isola. It has several million feet of timber to cut at Belzoni and this will be worked up as rapidly as possible. The company has its headquarters in Memphis. John M. Cathey is president and J. W. McClure is vice-president and general manager.

The Green River Lumber Company has purchased the timberland holdings of the Anderson-Tully Company, near Democrat, Ark., amounting to about 5,600 acres. The company proposes to take immediate steps for the development of the timber on this property and to put the land in cultivation as rapidly as the timber is removed therefrom. Democrat is located on the Marianna cut-off of the Iron Mountain system and it will be necessary for the company to build a road from this line to the land in question. The timber is to be brought to Memphis, where it will be manufactured into lumber by the Green River Lumber Company.

Harry T. Darr, associated for some years with the Interstate Commerce Commission at Washington, has been chosen as assistant secretary of the Southern Hardwood Traffic Bureau, which was recently organized here

and which is handling all of the contests scheduled before the Interstate Commerce Commission affecting shippers in the southern territory. Mr. Darr, through his position, becomes the right-hand man of J. H. Townsend, general manager of the Southern Hardwood Traffic Bureau.

The D. J. Landers Lumber Company, which has fifteen lumber sheds between Springfield, Mo., and Imboden, Ark., has made preparation for opening yards at Hoxie, Ark. The yard at Imboden was opened only a few days ago.

Russe & Burgess Inc. have filed application for an amendment to their charter through which it is sought to increase the capital stock from \$150,000 to \$175,000. The application is signed by the principal stock holders of the company, including W. H. Russe and George D. Burgess. The company is preparing to make extensive improvements at its plant in North Memphis, full details regarding which will be furnished at an early date.

The insurance question, as affecting lumber risks in Memphis, is still far from definite settlement. The conferences which have been held between the law and insurance committee of the Lumbermen's Club of Memphis and T. L. Leatherwood of the Tennessee Inspection Bureau have not resulted in anything tangible. The propositions so far made by the latter have not been acceptable to the lumbermen, who intimate that it will be necessary for him to change the terms materially before the plans outlined by him will be acceptable to them. In the meantime the lumbermen are placing a considerable portion of their insurance with companies not identified with the board of underwriters.

The Attalla Lumber Company, Starkville, Miss., has filed application for a charter under the laws of that state. D. W. Baird of Chicago and W. F. Clary and W. T. Pride of Memphis are among the principal incorporators.

Among the prominent visitors to Memphis recently has been W. B. Sissons of the Sowers-Leach Lumber Company, Columbus, O. Mr. Sissons was here in connection with plans for the opening of a distributing agency or the establishment of a mill at this point. He said that he had been attracted to this city by virtue of advertising done by the Business Men's Club. He left Memphis for Turrell, Ark., without giving any definite idea as to what the company would do in regard to the proposition.

The contract is to be let at once for the building of the shop of the Missouri & North Arkansas railroad, at Harrison, Ark. The estimated cost is approximately \$100,000. The Missouri & North Arkansas is materially increasing its equipment and is likewise preparing, under the receivership, to build a number of tracks to timber and other resources, which will prove valuable feeders to the main line.

The Mississippi river at Memphis is again rising but lumber interests are of the opinion that there is nothing to be feared in the way of another flood. It is predicted that the stage will go to some twenty-five feet, which is ten feet below the danger line and some fifteen feet below the stage reached here a short time ago.

Preparations are being made for the rushing of work on the repair of the levee at Beulah, Miss. A branch line has already been built by the Yazoo & Mississippi Valley railroad for the handling of the necessary material and work on the filling of the crevasse is to be undertaken at once. In the opinion of those in close touch with conditions there, it is certain that the crevasse can be completely repaired before danger can occur from any rise in the Mississippi.

The Stout Lumber Company has resumed operations at Thornton, Ark. This company closed down its plant Nov. 10. During the suspension many improvements and additions were made, the present capacity of the plant being 130,000 feet of lumber per day.

The Three States Lumber Company and Lee Wilson & Co., both of which own extensive timberland holdings in Mississippi county, Ark., are named as defendants in a suit which has been instituted by the United States government, covering unsurveyed lands in that section. There have been a number of these suits filed in the past but particular interest attaches to the present one because of the prominence of the defendants named and also because of the value of the lands in litigation.

Ralph May of May Brothers has returned from a business trip to Chicago. Mr. May says that the outlook is quite satisfactory and that, in his opinion, there will be plenty of business to keep all the hardwood lumbermen quite fully engaged for the next six months. He also comments on the very decided scarcity of plain oak.

◀ NASHVILLE ▶

Lumber manufacturers and others are greatly interested in a bill that has been introduced into the Tennessee legislature which will do away with the old common law "fellow servants" doctrine, and greatly broaden the scope of liability of employers to damages for personal injuries. The legislature has taken a recess until Mar. 17, and in the meantime manufacturers all over the state are organizing a campaign to defeat the bill, which is backed by the labor unions. Lumbermen are preparing to have a bill introduced into the legislature for the conservation of forests, and will seek to get appropriations for making this department more effective in Tennessee.

During the month of February building permits issued in Nashville called for improvements amounting to \$155,760, against \$71,000 for the same month of 1912.

Receipts of logs from the upper Cumberland river territory, brought down by the recent high tide, have materially increased the stocks of raw

material of local concerns. It is estimated that about 5,000,000 feet of oak, poplar, chestnut, hickory, walnut and other hardwoods have arrived from the upper river country.

The death of Robin Orr, aged ninety-one years, one of the oldest citizens living near Lynnville, Tenn., has resulted in some magnificent oak, walnut, hickory and poplar on his farm being placed on the market. So long as the venerable citizen lived he would not allow the ax to be placed to the magnificent trees on his place, and they were long admired by his neighbors.

The saw and planing mills of Sid Farmer, twelve miles from Dresden, Tenn., were blown up with dynamite by unknown miscreants, while Mr. Farmer was in Mississippi. A loss of \$4,500 resulted, and Mr. Farmer had no insurance.

The many friends of Charles M. Morford, a prominent lumber manufacturer, were greatly gratified at his election as president of the Nashville Manufacturers' Association. The Manufacturers' association started an important movement to bring all of the commercial organizations of Nashville, more than one dozen in number, together into one big building. The Nashville Lumbermen's Club is included in the number. If the movement is successful it will be the biggest thing ever attempted in Nashville in the way of commercial organization, as many millions of dollars of capital will be represented by such an amalgamation.

The Tennessee Timber, Coal & Iron Company, which owns 65,000 acres of timberland in Morgan, Cumberland and Fentress counties, has perfected its plant four miles from Nemo, a station on the Queen & Crescent railroad, and will soon be turning out 75,000 feet of lumber daily. The company is composed of Boston capitalists, and will have offices at Cartersville, Tenn. It is said that the company has an investment of about \$1,000,000.

The Cahaba River Lumber Company has been organized at Brent, Ala., by Thomas Goodall of Nashville, and others. The company contemplates putting in a circular mill, with daily capacity of 15,000 feet of lumber. The company owns about 3,500 acres, including largely oak and poplar timber.

◀ LOUISVILLE ▶

If the plans of C. C. Mengel & Bro. Company are carried out as indicated, Louisville will have probably the largest mahogany sawmill in the country. The company, as recently reported, has increased its capitalization by \$1,800,000, and the sale of this stock will enable it to expand its business enormously. It is definitely determined to build a new and much larger mill, while the facilities of the company for storing and handling lumber will also be enlarged. The concern has a site of over 100 acres in South Louisville and so has plenty of room in which to expand. The veneer mill may also be increased, but plans in regard to this have not been elaborated. Clarence R. Mengel, president of the company, believes that the present boom in mahogany is a permanent condition, and that the demand for the aristocrat of hardwoods will continue large indefinitely. Hence the company has every confidence in the advisability of making permanent betterments on a large scale.

The Edward L. Davis Lumber Company has been going over its local sawmill and getting things in shape for a heavy run during 1913. Members of the company are much pleased with the demand for quartered oak, in which the concern specializes, and report that the furniture factories and other important branches of the consuming trade are calling for more quartered oak than in some time. J. E. Davis, vice-president, is now on the road in the interests of the company, handling the buying of both logs and lumber.

The Booker-Cecil Company, one of the youngest and also one of the most hustling and successful of local hardwood concerns, has recently added a Hupmobile touring car to its equipment. The auto will assist in calling on the local trade. P. G. Booker, who does most of the buying for the company, has returned from a trip through central Tennessee.

D. E. Kline of the Louisville Veneer Mills is enthusiastic over the condition of business, reporting the demand for both veneers and panels to be well up to expectations and in fact above normal. The company has been pushing its figured gum panels aggressively, and is booking enough business to indicate that it is delivering the goods in fine style.

The Louisville & Nashville is now enforcing its tariff relative to milling-in-transit. The tariff is not exactly in accord with the most recent opinion of the Interstate Commerce Commission, which provides that hardwoods may be substituted for hardwoods, and not necessarily oak for oak, hickory for hickory, etc. As the general substitution will solve the problems incident to handling mixed cars of logs and lumber, the lumbermen are very anxious to have the Louisville & Nashville amend its tariff, which doubtless it will do in the near future. The Illinois Central and Southern railways will probably adhere to their original methods on the subject.

J. E. Barton, state forester, has been active of late in informing the public of the work of the forestry department. He addressed the state farmers' institute at Paducah recently, referring to the danger of fire, which he said the department will do its best to prevent. He declared that Kentucky is the natural center of the hardwood production by reason of the variety of its woods and the location of the state. He believes that the law under which the department is operating is practically ideal. He spoke before the Women's Outdoor Art League in Louisville this week. The state board of forestry has about completed plans for the establishment of a reserve in the mountains of eastern Kentucky,

and will announce the territory which has been secured in a few weeks. A tract of land near Frankfort has been secured for nursery purposes, and will be used in addition to a similar plat which is located adjoining the state fair grounds in Louisville.

Lumbermen who are anxious to have the Louisville & Nashville adopt a reasonable attitude in regard to switching, and who are supporting the Board of Trade in its action before the Interstate Commerce Commission looking to the forcible interchange of switching facilities, have been encouraged by the fact that the commission has ruled favorably to the shippers on a similar case, coming up from Baltimore. Consequently it is believed that an opinion will be handed down in which the Louisville & Nashville will be compelled for a reasonable charge to accept switching on cars originating at competitive points.

Favorable tides are running in the tributaries of the Kentucky river and a large quantity of logs and rafts are coming out. This means that mills in that part of the state will get an early start on their season's sawing.

The Southern Lumber & Boom Company at Valley View, Ky., has sold its mill at that point to Milliken & Aldrich, who, it is reported, will remove the equipment to Irvine, further up the river.

The sawmill formerly operated by the Washington Mining & Manufacturing Company at Park's Ferry, Ky., has been sold to W. F. Clark and will be put in operation. Dr. G. E. Martin, who bought the property at a bankrupt sale, will retain control of the planing-mill.

◀ ST. LOUIS ▶

Building permits showed quite a gain during February this year over those during the corresponding month last year.

Receipts and shipments of lumber at St. Louis during the month of February showed an increase over the corresponding month last year, according to the report of the Merchants Exchange. Receipts by rail this year were 17,757 cars, showing an increase over last year of 4,028 cars, when 13,729 cars came in. Shipments this year were 11,219 cars, a gain over last year of 1,989 cars, when 9,230 cars were shipped.

The stockholders of the Wm. G. Frye Manufacturing Company have asked for a dissolution of the company. The corporation has not been in active operation since July, 1911, when its storehouse was burned down.

W. W. Dings, secretary of the Garetson-Greason Lumber Company, who has been out on the Pacific coast on a selling trip, returned home a few days ago, but did not tarry here long, leaving after two or three days for Texas on another selling trip.

E. W. Blumer, sales manager of the Lothman Cypress Company, is out on a selling trip but is expected home in a few days.

Many important matters came up at the weekly meeting of the board of directors of the Lumbermen's Club, held a few days ago. Bettering the club and making it the best of any of the lumbermen's clubs in the country is the ambition of President Thos. C. Whitmarsh, and most of the suggestions which have been offered and are now being carried out, came from him. The new propositions are to extend invitations to the members of every lumbermen's club in the country, to make their headquarters in the rooms of the local club when they come to St. Louis. Desks and writing material will be placed at their disposal and they can write their letters, meet friends and make themselves generally at home; a booklet, containing the constitution and by-laws of the club and a roster of the members of the club, to show the many benefits that can be obtained by becoming a member, whether they are local residents or not.

The office of the Lumbermen's Club was moved last week from the ninth to the twelfth floor of the Wright building.

Thos. E. Powe, president of the Thos. E. Powe Lumber Company, returned home a few days ago from a trip through the South. He visited many mills and he found that there was a great scarcity of dry lumber. When it can be obtained, it commands a fancy price.

◀ MILWAUKEE ▶

The Workmen's Compensation Mutual Liability Insurance Company of Milwaukee has been incorporated and has opened offices in the Majestic building to issue policies to Wisconsin manufacturers, protecting them from all losses which may be caused as a result of injuries received by employees. The company will settle all claims under the provisions of the Wisconsin Workmen's Compensation act. About fifteen per cent of Milwaukee employers of labor have accepted the terms of the act, and the percentage is constantly increasing, as employers are becoming more and more convinced that settling under the terms of the act is much cheaper and more satisfactory than to defend personal injury suits in the courts. This has resulted in the need for such a company to settle all claims made by the workmen, as awarded by the State Insurance Commission, which is the jury by the terms of the act to decide the amount of damage done. The high rates charged by casualty companies on account of the provisions in the act has resulted in the forming of this mutual company. The employers who are insured will be charged premiums as low as can possibly be done and still be able to pay the claims and the expenses of carrying on the work. The forming of the company will also do much toward ridding the city of "professional personal injury" lawyers, who get most of the damage awarded the injured by a court while the latter gets practically nothing.

The deal whereby the Edward Hines Lumber Company of Chicago come into possession of valuable timberlands in northern Wisconsin was

Kraetzer-cure LUMBER

¶ Kraetzer-Cured lumber is susceptible of being thoroughly kiln dried or air dried in less than one-third the time ordinarily required for seasoning unsteamed wood.

¶ Kraetzer-Cured lumber does not case-harden, check, end-split or stain, and dries without warping or buckling.

¶ Kraetzer-Cured lumber has a uniform tone of color. Its working qualities are greatly improved, and the beauty of the flake on quarter-sawn stock is enhanced.

¶ Kraetzer-Cured lumber dries out to materially less weight than unsteamed wood, ranging from 200 to 500 pounds per thousand feet.

¶ Kraetzer-Cured lumber will neither shrink nor swell, and the grain will not raise when water stains are employed in finishing.

¶ Kraetzer-Cured lumber is not impaired in strength or quality by the process.

¶ Kraetzer-Cured lumber is produced by the use of the Kraetzer Preparator, a steel cylinder permanently closed at one end and fitted at the other end with a quick-opening and closing steam-tight door, manufactured by

The Kraetzer Company 537 South Dearborn Street CHICAGO, ILL.

Kraetzer-Cured lumber is produced by the following well-known manufacturers:

John Schroeder Lumber Company....Milwaukee, Wis.
Maple, Birch and Oak Flooring

Russe & Burgess, Inc.....Memphis, Tenn.
Red and Sap Gum, White and Red Oak

Bennett Hardwood Lumber Company, Memphis, Tenn.
White and Red Oak, Red and Sap Gum, Sycamore and Cypress

Lamb-Fish Lumber Company.....Charleston, Miss.
Red and Sap Gum, White and Red Oak, Cypress

Santee River Cypress Lumber Co.....Ferguson, S. C.
White and Red Oak, Red and Sap Gum, White Ash

Forman-Earle Company.....Heidelberg, Ky.
Poplar, White Oak and White Oak Flooring

C. L. Willey.....Chicago, Ill.
Mahogany and all figured Foreign and Domestic Woods

New England Hardwood Co.....Mountain Mills, Vt.
Birch, Beech and Maple

Saline River Hardwood Company.....Pine Bluff, Ark.
White and Red Oak, Red and Sap Gum

formally ratified and accepted by the parties on both sides recently. The total acreage approximates 100,000 and the cash consideration is unofficially said to be between \$2,000,000 and \$3,500,000. The land is situated in Sawyer and Price counties and a mill at Park Falls.

The big sawmill of the Faust Lumber Company at Antigo has started its season's cut. Between seven and ten million feet of lumber will be cut, a large amount having been purchased in the vicinity of Pelican Lake and Elderon, of which many carloads are being received daily.

At the annual meeting of the Northwestern Steel & Iron Works, manufacturers of woodworking machinery at Eau Claire, a decided increase in and growth of business was reported. An increase in volume of \$100,000 over the preceding year showed the excellent condition of the concern. K. Rosholt was elected president and E. R. Hamilton secretary-treasurer.

Ferdinand Armstrong, one of the pioneer lumbermen of northern Wisconsin, recently died at his home in Marinette. He was associated for many years with Senator I. Stephenson in the lumber business. At first he was connected with the Stephenson company at Flat Rock and later was superintendent of the Peshtigo Lumber Company at Pesutigo, which position he held for thirty years. A wife and eight children survive him. He was eighty years old.

Paul Lachmund, sixty-eight years old, for a score of years secretary of the Wisconsin Retail Lumber Dealers' Association, and one of the best-known men connected with the lumber business in the state, has died in Milwaukee. Five sons and two daughters survive him.

The State Railway Commission has issued an order directing the Soo Railroad Company to discontinue discrimination in switching rates, upon complaint of the I. Stephenson Company. The railway company was charging \$2 a car for switching at Rhinelander to the Stephenson company, while other concerns were charged nothing.

Thomas M. Blackstone, president of the Phoenix Chair Company of Sheboygan, recently died at his home in that city at the age of eighty years. He was for many years prominent in the political and business life of the state. Mr. Blackstone was a native of Ireland and came to Sheboygan in 1849. In 1875 he was active in organizing the Phoenix Chair Company of which he was, to the time of his death, the only surviving original stockholder. He was at first secretary and later president and manager of the firm, which operates the largest chair factory in the country.

A four-story addition is being erected to the plant of the Racine Stool Company, at Racine. It is to be of brick and measure 71 by 115 feet. The present crew of 100 men now works until 9 o'clock each evening to fill the orders. When the addition is completed the capacity will be doubled. It will provide additional space for the finishing department, salesrooms and shipping department.

◀ DETROIT ▶

Bert Allan of Allan Brothers reports that, considering the high price of hardwoods, business has been exceptionally good and prospects for a busy spring and summer are very bright.

A. E. D. Allan of Allan Brothers, who has been seriously ill with inflammatory rheumatism since last December, is now able to sit up for a while each day. Just as soon as his condition permits he will leave for Florida to recuperate.

Secretary John Lodge of the Dwight Lumber Company reports that that concern's flooring mill is exceptionally busy, in spite of the continued increase in the price of oak.

The Thomas Forman Company has enjoyed a busy fortnight with orders and inquiries plentiful. With a great amount of construction work ahead for this spring the Forman company expects a continuing demand for hardwood flooring. Thomas Forman of this company was out of town on business last week.

For the first time in over a year the E. W. Leech Company has noticed a lull in the hardwood lumber trade. While business has not been quite so brisk during the past month, Manager Smith is optimistic regarding the coming spring and summer.

George I. McClure says that owing to the various automobile shows during the months of January and February the auto body plants were not so busy as at other times and this resulted in a temporary decrease in the demand for hardwoods. Mr. McClure reports the trade in interior finish very good. Prices on birch, ash, elm and oak are high. There, too, has been an increase in the price of low-grade hardwoods and boxing and crating lumber. Nos. 1 and 2 oak and 2½", 3" and 4" ash are also scarce and prices are high.

F. B. Ward of Hanson-Ward Veneer Company of Bay City; Mr. Todd of the C. F. Luehrmann Hardwood Lumber Company of St. Louis and Mr. Kerns of the Kerns-Utley Lumber Company of Chicago were Detroit visitors during the past two weeks.

That the decrease in the demand for hardwoods during the past month was general was confirmed by William Brownlee of the Brownlee-Kelly Company. Mr. Brownlee says that while business done last month exceeded the trade of the same month in previous years, the hardwood men did not anticipate that the decline would be so great. The hard weather and the fact that the auto companies are not ordering so freely is probably the main reason for the decrease in business, says Mr. Brownlee. He reports that his yard is well stocked and is not short on any materials. He does not expect prices to advance any further, but rather expects a decline in the near future.

Kraetzer-cure LUMBER

W. L. Martin of the Martin Lumber Company of Chboygan, Mich., was a visitor in Detroit last week.

A. L. Holmes has just returned to Detroit from an extended visit to California.

The Hardwood Market

< CHICAGO >

Severe weather in the Chicago territory during the last few weeks has somewhat retarded active building operations, and for this reason slightly less active trade has prevailed among the handlers of lumber going into buildings. A decided increase in aggregate building permits, however, is noted in the record for the Chicago building trade, and there is every reason to believe that a call from this branch of the consuming trade will be excessive in the immediate future.

While there has been some little recession in demand in all lines, it is not a condition which causes any bad effect upon the market. It comes from causes which are purely local and temporary. Some little difficulty is being experienced by the local yards in filling out their stocks. Local consuming plants also have incomplete assortments of hardwood lumber, and in some cases there is a slight disposition to meet only immediate demand from purchasers.

The usual condition prevails in all quarters, there being firm prices and a steady demand for various items of hardwoods, particularly, of course, in the lower grades. Oak, ash and chestnut are especially strong, while there has been a slight weakening in the position of gum.

The unanimous opinion of the local trade is that business will continue on the present active and satisfactory basis for the next half year at least, and that even after that term there is no apparent reason why such activity should not continue further.

< NEW YORK >

Notwithstanding a slight falling off in demand both wholesale and retail, prices continue firm with some advance noted the last two weeks. It would seem that buyers do not look for any great increase in prices but believe that any change will be toward lower values; consequently, demand is limited almost to actual needs. Some wholesalers are of the opinion that prices should be held at the present range, fearing that if they are sent higher the demand will be limited and a general reaction may result in a drop in prices.

Plain oak remains in steady call; chestnut and common maple also show strength. Sound wormy chestnut has advanced \$2 on 4/4 stock and \$1 on thicker. Thick ash shows another advance and this lumber is now perhaps the strongest feature of the market. Birch, maple in the common grades, and poplar are strong at higher prices. Reports are still received of short supplies of good grades and this, with the healthy movement of lower grades, augurs well for a steady spring market.

< BUFFALO >

Trade in hardwoods continues a little more active than it usually is at this season and the scarcity of lumber makes it a difficult matter to fill many of the inquiries. Lumbering conditions in various sections have been unfavorable much of the time, and this has had its effect on prices, which have been firm all around. Plenty of snow has made handling of lumber at the local yards difficult work during the present month. There is also some complaint of freight congestion in local railroad yards.

Plain oak has been in better demand than any other hardwood and its scarcity has made prices very firm. Frequently cars come in and are moved without being piled up in yard. Quartered oak holds pretty firm and at better prices than a year ago. Brown ash, birch and maple are among the other woods most wanted, though everything seems to be in fair inquiry. Poplar and basswood are firmer, in the lower grades especially. The mills have but little low-grade stock to offer.

< PHILADELPHIA >

With the exception of a slight advance in one or two lines, there has been no appreciable change in the hardwood market from a fortnight ago. The increasing demand for material employed in the manufacture of furniture, automobile bodies, caskets, etc., supports a lively activity in the consuming industries, and nowhere is there a noticeable increase in the pile at the yards. Notwithstanding the presidential inauguration and the prospect of an early session of the new Congress, the business man continues to hustle along as if nothing unusual were in the air, which is a strong indication that every confidence is felt as to the outlook, and that politics for once at least is powerless to disturb a settled commercial equanimity.

There has been a slight diminution of activity in the box factories, but it is believed to be only temporary. Shipments are reported a little easier, but the depleted stock at mill ends is very discouraging to the hunter for desirable material, with no promise of improvement for

Announcement

To Veneer Consumers

¶ Within a few days our new plant will be operating.

¶ We will be equipped to saw and slice high-grade veneers, in mahogany, quartered oak, Circassian walnut, American walnut and rosewood, and to manufacture band-sawn lumber in the same woods.

¶ Our superintendent and the operators of all our machines are recognized as without peers in their respective lines—their work insures the most perfectly manufactured Veneers and Lumber possible.

¶ Our veneer and band saw mill is the most modern and best equipped in America.

¶ Through our log buyers here and abroad, we always have as fine a grade of logs as can be procured by anyone.

¶ You are cordially invited to inspect the mill, and we believe you will be repaid whether you are now in the market or not.

**Fred W. Black Lumber Company
Chicago**

Take Douglas Park "L" to 40th Ave. and walk one block south

WANTED

All Kinds of High-Grade

HARDWOODS

S. E. SLAYMAKER & CO.

Representing
WEST VIRGINIA SPRUCE LUMBER CO., Fifth Avenue Building,
Cass, West Virginia. NEW YORK

Mutual Fire Insurance

Best Indemnity at Lowest Net Cost
Can Be Obtained From

- The Lumber Mutual Fire Insurance Company, Boston, Mass.
- The Lumbermen's Mutual Insurance Company, Mansfield, Ohio.
- The Pennsylvania Lumbermen's Mutual Fire Insurance Company, Philadelphia, Pa.
- The Indiana Lumbermen's Mutual Insurance Company, Indianapolis, Ind.
- The Central Manufacturers' Mutual Insurance Company, Van Wert, Ohio

Timber Values

Timber is cheaper today than it was thirty years ago.

That is our sober conclusion after a review of all the facts that influence or touch timber values.

Thirty years ago neither timber nor its products was worth much. If logs would not produce a heavy percentage of high grade stock they were worthless and being worthless were left in the woods.

Timber is being used more closely. It is in request for many purposes of which the early operators did not dream. To its use as lumber and in similar forms is being added a demand for timber as the raw material for chemical treatment. For such use wood of sound quality is required, knot, shake and crook defects which render logs valueless for lumber do not reduce their value for chemical treatment.

Thirty years ago about 25 per cent of the timber in a forest was used. Today there is an outlet for possibly 60 per cent of it. Within another decade we expect to see 80 per cent of it used—a gain of 33⅓ per cent.

Every addition to the list of wood users gives added value to timber of all kinds by broadening the market for it.

All timber owners are sharing in this constant betterment in prices. Do you own timber?

James D. Lacey & Co.
Timber Land Factors

Chicago, 1750 McCormick Building
Portland, 1104 Spalding Building
Seattle, 1009 White Building

some months to come. The open winter has given an impetus to building work, and a big year is anticipated.

Among the hardwoods plain oak is distinctly the scarcest article on the market, with prices climbing dangerously high; many orders are turned down because of lack of supply; quartered oak is forging ahead; ash is in great demand; the better grades of chestnut are inclined to lag, while sound wormy chestnut, 4/4, 5/4 and 8/4 is very active. Maple, beech, cherry and basswood hold good position. Low grades only of poplar show activity. The mahogany and veneer market is well sustained; birch is making new friends.

◀ PITTSBURGH ▶

The hardwood situation continues very satisfactory to the man who has lumber to sell. Prices are firm and the prospects are that there will be a tight lumber market all this spring. Demand from the manufacturers and big industrial concerns and the railroads is keeping up fairly well and there is an undertone of buying sentiment that promises to develop into some fine business for the wholesalers before summer. Everything looks busy for the Pittsburgh district for the first eight months of this year. During the past few weeks there has been some halt in the rush of orders that prevailed just before January, which was accounted for entirely by political conditions, the fear of a big firemen's strike on the eastern roads, and the Mexican situation. Among retailers there is a feeling that building will be at least twenty-five per cent greater in volume this year than last. They are increasing their total of inquiries and orders right along, and with a little good weather to encourage contractors some big business is expected in this line.

◀ BOSTON ▶

The general market for hardwood lumber is very firm and the tendency of prices continues upward. Dealers in this market state that the advance is not caused so much by an active demand as it is by the real shortage in the hands of the manufacturer and wholesaler. Dry stock has been in very small supply for some time, and there is no immediate relief in sight. Naturally manufacturers are not anxious sellers at the present time.

The demand for nearly all classes of hardwood lumber is very fair and the outlook favors an increasing business. Manufacturing consumers are using good-sized quantities right along, and few have more than moderate sized reserve stocks. One of the features of the Boston market is the strong call for both plain and quartered oak. Plain oak, one inch ones and twos, is firm. It is reported that better than top prices have been paid where quick delivery has been demanded. Quartered oak, one inch, is selling at very good prices. Black walnut has been in fair call, and prices are firm. There has been a very good call for maple of late. Cypress is held in a fairly steady way under a moderately active demand.

◀ BALTIMORE ▶

The favorable conditions which have obtained in the hardwood trade continue in evidence, being perhaps even more pronounced than formerly. Oak does not seem to have touched the highest figures, with the demand very active and the mills out of stocks. Although large quantities of oak have been shipped abroad, it does not appear that any advance toward congestion has been made, the receipts being picked up as fast as they came to hand, with the result that the entire list is high, the mills are unable to take care of all the demands made upon them and stocks so scarce as to deserve designation as a shortage. The most diligent inquiry fails in many cases to develop sources of supply, and the hardwood man who takes an order without knowing where he can get hold of the lumber to fill it runs the risk of making a loss. There appears to be no really fixed price, each producer naming the figure which to him seems to represent the real value of the lumber asked for, and it follows that there are material variations in ideas of values, a millman who is thoroughly informed being in position to turn his knowledge to excellent account. Next to oak chestnut appears to be in strong demand, with sound wormy and all other grades being freely called for, and with the quotations either holding their own or being marked up. Much chestnut is also finding its way abroad, and between the domestic and foreign markets the producers are having all they can do. Common poplar is less strong, the offerings having been rather more plentiful than the requirements of the trade called for, and the freedom of shipment serving to impart an easier tone to the trade. With regard to extra wide stocks, it is also to be said that they still fail to realize the expectations of the producers. Under existing conditions, with the needs of the automobile builders so restricted and with extensive substitution of other materials, it is only natural that there should be no special buoyancy in these stocks, which are called for only in comparatively small lots. Other divisions of the hardwood trade are in the main satisfactory, the lower grades in particular being sought in such quantities that the mills have been unable so far to accumulate stocks in any considerable volume. How to get their wants filled is one of the chief problems of the dealers, who can get orders by simply writing for them but find the supply inadequate. One wholesaler, for instance, stated as an illustration that he had been able to secure only four cars of a certain grade of lumber when he could easily use fourteen. Some trouble on account of a car shortage is also being experienced. Beyond this, however, and the relative inadequacy of the supplies, the hardwood

trade has nothing to complain of and the season's activity shows no signs of abatement.

◀ COLUMBUS ▶

Despite the rather unfavorable winter which has prevailed during the past fortnight, the hardwood trade in Columbus and central Ohio has been fairly active. Demand is coming in from both retailers and factories, and it is about a "stand-off" between the two in buying. Shipments are coming out fairly well and there is no delay occasioned from a lack of cars.

Prices are ruling firm and every change is towards higher figures. No weakness is apparent in any grade or variety. Dry stocks are generally light and all efforts of mills to increase stocks have been unsuccessful because of the good demand. Yard stocks are heavier than formerly, but are still rather light and good buying from that source is expected right along. Active preparations have been made for a good building season, judging from the work on hand in architects' offices. Factories are generally prosperous. Furniture concerns have a good trade, and as a result are buying stocks rather liberally. Factories making implements and vehicles are also good purchasers. Manufacturers are not stocking up on materials but are buying what is needed for immediate use.

The movement of the lower grades is good, but all grades are moving well. In fact, there is no accumulation of stocks and prices are very strong as a result. Collections are reported better in most sections. Both plain and quartered oak is in good demand and the volume of business is good. All grades of plain oak have advanced and the tendency is still upwards. Chestnut is one of the strongest points in the market, especially sound wormy. Basswood is moving well and the same is true of ash. Poplar is strong and automobile factories are buying the wide sizes better. Other hardwoods are firm and unchanged.

◀ CINCINNATI ▶

There is nothing but confidence in the future market as expressed by all dealers, who report numerous inquiries covering all items on the hardwood list, the most inquired for being plain oak and ash in all grades and thicknesses, while other woods are much in request. High prices prevail and still higher prices are looked for. Notwithstanding the fact that there have been some very heavy receipts of almost all kinds of lumber during the last few months, stocks here are only medium, as the demand has been almost up to the receipts. Yards are, however, in much better shape to take care of the coming heavy spring business than they expected to be. Southern manufacturers are none too well supplied with stock with which to fill orders that are being constantly offered to them by the big buyers. They claim that there is sure to be a general shortage of practically all hardwoods this year. There is not at the present time nor can there be an accumulation of dry stock before midsummer at least and then only in case of a big slump in demand which is quite unlikely. Dealers are all well satisfied with conditions of the hardwood market.

All items command top prices, with plain oak simply out of sight, and dealers claim this wood will go still higher. Manufacturers of oak are in a very strong position and demand the highest prices in years for all grades. They have only light supplies, the continuous demand having taken up stock as fast as in shipping condition. What there is on sticks is practically sold ahead and the chances are slim for dealers to get what is needed for their requirements. Quartered oak is also much in demand and is gaining in price. Close to plain oak is the demand and the scarcity of ash. This wood is very hard to obtain and all grades and thicknesses sell quickly. Chestnut is also very strong and sound wormy is much sought for. Maple sells readily at good prices. Cottonwood in No. 2 and 3 common is very hard to find, and all dealers are short on this item. Gum is doing well in the upper grades and the low grades are very strong, the box factories accepting at good prices all low-grade hardwoods suitable for their purpose. The general condition of the market is satisfactory and a big year for the hardwood dealers is freely predicted.

◀ TOLEDO ▶

The local hardwood yards are far from having well-filled stocks, although dealers have been buying fairly liberally. Buying has been free nearly all winter, however, and dry, desirable stocks have been scarce. Prices continue extremely firm. There has been an increase of from \$2 to \$4 in plain red oak, firsts and seconds having been quoted on the local market at about \$62. Hickory is not especially strong in demand just now but basswood and maple are stronger. Maple flooring is in good demand and there has been an increase in price. Quartered oak is not so strong in demand, although there is a fairly firm call from furniture concerns. White oak is strengthened but is short in supply. There is every prospect of a strong season as soon as the weather permits, as shown by the plans in the offices of local architects.

◀ INDIANAPOLIS ▶

Hardwood men, generally, in this vicinity say they are well pleased with the hardwood situation. In many lines it is difficult to obtain a sufficient supply of hardwoods to meet the demand. This is especially

A Remarkable Shipment of Mahogany

For the past two weeks we have been unloading at our Chicago plant the most remarkable shipment of mahogany logs we ever received.

This shipment fills several cars and is made up of nearly six hundred selected logs.

Every precaution was taken to insure as far as is possible in mahogany only such logs as will produce the very highest type of mahogany veneer for high-class cabinet purposes.

Those logs already opened up reveal an amazing quality, character and variety of figure. We will secure from this shipment some brilliantly mottled wood for high-class piano manufacture.

Unusually good stock for furniture purposes has already been cut from this shipment and a very considerable quantity more is insured.

Altogether, judging from what has already been shown, this shipment will place upon the market the finest stock of mahogany veneer that has yet been turned out at our plant.

Buyers are already too familiar with our perfection of manufacture to need further explanation of our methods.

Users of mahogany visiting Chicago are earnestly invited to call and inspect the Willey plant and veneer and lumber warehouse at Robey Street and Blue Island Avenue. Blue Island Avenue car at the postoffice to Robey Street.

C. L. WILLEY, Chicago

Largest Mahogany Veneer and Lumber Producing Plant in the World

true of all grades of oak. Prices are much higher than they were a year ago and there is no indication of a break in the market soon. Business throughout the winter has been much better than it was during the corresponding period of last year. According to manufacturers and wholesalers the retailers are somewhat timid about taking hold and placing orders for large quantities. Some of them seem to feel there will be a reaction later on, accompanied by a reduction in prices, but there appears to be no foundation for this.

Bluestone Land & Lumber Company

MANUFACTURERS

WEST VIRGINIA HARDWOODS

Soft White Pine, Oak, Poplar, Chestnut, Hemlock

Band Sawed Stock

RIDGWAY

COMPLETE PLANING
MILL FACILITIES

PENNSYLVANIA

The Tegge Lumber Co.

High Grade
Northern and Southern
Hardwoods and Mahogany

Specialties

OAK, MAPLE, CYPRESS, POPLAR

Milwaukee, Wisconsin

CINCINNATI

Hardwood Manufacturers and Jobbers

SWANN-DAY LUMBER CO.

Mfrs. YELLOW POPLAR and WHITE OAK

SALES OFFICE—SECOND NATIONAL BANK BUILDING

SHAWNEE LUMBER CO.

HARDWOODS, WHITE PINE and HEMLOCK

Sales Office—South Side Station—C. H. & D. R. R.

RIEMEIER LUMBER CO.

OAK, POPLAR, CHESTNUT

SUMMERS AND GEST STREETS

JAMES KENNEDY & CO., Ltd.

OAK, POPLAR AND OTHER HARDWOODS

FIRST NATIONAL BANK BUILDING

The Kosse, Shoe & Schleyer Co.

WALNUT, OAK, AND OTHER HARDWOODS

103-4-5 CAREW BUILDING

OHIO VENEER COMPANY

Manufacturers & Importers FOREIGN VENEERS

2624-34 COLERAIN AVENUE

CHARLES F. SHIELS & CO.

SPECIALISTS IN WIDE STOCK

POPLAR, OAK, CHERRY, BIRCH

GEORGE LITTLEFORD

RED CEDAR, CHERRY

OFFICE: 1263 RICHMOND STREET

< NASHVILLE >

The hardwood lumber market of Nashville continues satisfactory. There is a greater demand than supply of oak, and large manufacturers have stopped taking orders in this department. High-grade poplar has been in better demand, and chestnut is moving in a satisfactory way. Wholesale lumbermen generally express themselves as well pleased with the business conditions. The main question now is securing adequate supplies of raw material.

< LOUISVILLE >

Hardwoods are exceedingly good property just now, and a bill of lading for a car of plain oak is regarded as about as good collateral as a two per cent government bond. Lumber is really scarce, and buying aggressive, a combination which means one thing at least—exceedingly stiff prices. The demand for plain oak is regarded as a constant factor, inasmuch as it has been a feature of the situation for many months. Quartered oak has had a few ups and downs in that time, but at present is in excellent call, and prices have responded to the improved demand. Handlers of the commodity reporting that buyers want material and are willing to pay the advances. This is believed to be largely due to the scarcity and high price of mahogany lumber, which has caused furniture manufacturers and others who were intending to feature the imported wood to return to quartered oak as being the best buy, in view of prices and availability. Other woods are almost as active as oak. Ash, for instance, is almost out of the market on account of extreme scarcity, and buyers who need the stock are continuing to take it unaged. Maybe some of the trade will begin to specify "Kraetzer-Cured" in the near future, if the current scarcity continues. Chestnut is also pretty well sold out, with little surplus of any grade. Poplar is improving in the upper grades, the lower having been brisk all season. Red gum is scarcer, and the upper grades particularly are hard to find. The outlook is for continued good business, and thus far President Wilson has not scared a single soul.

< ST. LOUIS >

The general hardwood situation is strong. The upper grades in oak, gum and cottonwood are in splendid demand. The lower grades are also good sellers. The best item in demand is oak. Ash, too, is being much sought after. Poplar is not selling well; in fact it is the poorest seller in this market. Dry stock in all items is very scarce and on this account there have been advances in prices. Buyers in the South can find but little dry stock, owing to the continued wet weather which has prevented logging and which has curtailed the output seriously. There is considerable activity in cypress, some slight advances being reported. Those having good stocks on hand can obtain any reasonable price for their holdings.

< MILWAUKEE >

The stormy weather of the past week or so has delayed small building operations in this city and about the state, but there is more large building going on in Milwaukee than ever before at this season of the year. A record number of permits are being issued by the building inspector and there is every indication that the spring building season will be unusually active.

Retailers all over the state have been rushing in their orders of late, so that their stocks may be in readiness for the spring rush. Stocks in retail yards are much lighter than usual at this time. The scarcity of dry stocks makes it necessary in most cases for the jobber to postpone delivery on orders and there is considerable uneasiness, because the situation is becoming complicated by a shortage of cars in some sections of the northern Wisconsin lumber country. Manufacturers are finding it hard to secure adequate transportation facilities, while loggers in many cases have to deck their logs at an extra expense of fifty cents per thousand feet. At the present time more than 300 carloads of logs are being received daily in Marinette and Menominee over the Chicago & Northwestern, the Chicago, Milwaukee & St. Paul, the Soo and other roads. This is about fifty carloads more than last winter at this time.

The scarcity of snow and labor has been felt in Wisconsin, Michigan and Minnesota logging districts during the winter, but lumbermen say that the Wisconsin and Michigan districts will produce more than a normal output. Practically every large mill in the lumber country is in the market for logs, most of them having heavy orders booked. Stocks at all the big mills have been decreased greatly during the past six months and many concerns are sold well ahead of their season's cut.

The light shipments of oak which are being received from the South are resulting in higher prices for both quarter-sawed and plain oak. Demand during the past year has been much stronger, while it is said that logging and lumbering operations in the South have been hindered by the excessive rains. Northern stocks, including birch, maple, basswood and rock elm, are practically exhausted in upper grades. Jobbers say that if the market continues to hold so firm with prices high, it may tend to restrict business, but trade has been active thus far. It is true, however, that the sash and door concerns are buying only enough to satisfy their immediate wants, and are inclined to await developments. Demand from other sources is strong.

◀ DETROIT ▶

During the past fortnight the Detroit hardwood market has experienced a slight slump but dealers are generally optimistic and business will soon pick up. There has been a good demand for No. 1 and 2 grades spruce and prices advancing continually. Birch, elm and ash have also been in demand. A decrease in the amount of orders from the auto body plants has depressed the market. The hardwood flooring trade, however, is exceptionally busy with orders and inquiries plentiful despite an increase in the price of the finished product. An increase in low-grade hardwoods used in crating and boxing is reported. The box and veneer trades are fairly busy and prospects are favorable for good business this spring. A large amount of building is in prospect for this spring and this will mean strong demands for hardwoods for interior finish and flooring.

◀ GLASGOW ▶

The carters' strike in this city still continues with hopes of a settlement still as far off as ever. All efforts having proved futile so far. Both sides are determined to yield nothing, with the result that the general trade of the west of Scotland is becoming more and more disorganized. The masters firmly maintain that as the strike was not of their seeking they are quite prepared to fight the traders' battle, and contend that if they gave way in this instance they would be faced with the same trouble in six months' time. The congestion at the quays is becoming serious, each succeeding steamer dumping its cargo which is left there practically untouched. In the case where goods require to be stored under cover the only course left open is to put them outside and cover them with mats, with the result that the goods are damaged.

The S. S. "Marina" arrived a few days ago from Baltimore and Newport News with a large cargo of American hardwoods, comprised chiefly of oak planks on contract for the railway companies. Parcels of walnut, poplar, and oak lumber were sent forward in addition to a few logs of oak, walnut and poplar. Discharge is not yet completed but what is out is of good quality throughout. The S. S. "Irthington" has just arrived in port from New Orleans with the usual assorted cargo. The notables in the shipment according to manifest are pitch pine—both lumber and logs—cypress, gum and oak. Hickory and ash logs are also a pre-dominating feature, having been notable in the last few steamers. Of course, they are all in fulfillment of contracts made toward the end of last year. Staves are also a big item, but gum staves, for which there is no outlet at present, have come in too freely for the past month or two, and each shipment has had to go into store. Plain oak boards are in good request and the high prices asked are being paid. With no yarded stocks available, keen competition is evinced for the consignment parcels.

Spruce and birch deals have come in in small shipments, but as delivery of the goods cannot be obtained buyers are somewhat reluctant to purchase. Of course, the prices demanded have a say in the matter as well.

The import of birch logs is fair and good parcels meet with prompt disposal. Shipbuilding continues brisk, and it is to be hoped that other wood-consuming industries will pick up a little better and show a fair return for the first quarter.

One of the local railway companies has just issued a large inquiry for the supply of oak scantling to fulfill its yearly requirements.

Pitch pine charterers are holding off from chartering ahead of their immediate requirements, evidently waiting till the horizon of the freight market becomes clearer.

◀ LIVERPOOL ▶

The market position here has been chiefly dominated by the three mahogany auction sales this week. There has been a strong company of buyers and again a keen demand for all classes and grades was noticed. Speaking of mahogany reminds us of an interesting rumor afloat concerning a well-known mahogany veneer cutter of New York. This dealer, who has recently opened up operation in the Liverpool trade as a merchant, contemplates buying his mahogany direct; with this object in view, he intends to send a representative out to the coast of Africa to complete his purchases direct. Surprise is expressed that this has not been tried previously as purchases through the auction sales are undoubtedly expensive and slow without any compensating advantages. This experiment has occasioned much interest and has been quite the topic of conversation. The general opinion seems to be that the new enterprise is bound in the long run to be successful because of the heavy expenses which the auction sales add to the cost. Of course the mahogany brokers have a powerful hold over this importation business and they are not going to release their hold over it without a big struggle. At the same time in these days of keen competition it is surprising that such an out-of-date and cumbersome method of business should still be in existence. It says much for the enterprise of Americans that one of their number should have been the first to inaugurate a more up-to-date system of business.

The hardwood market is not nearly as firm as was noted at the end of last year, and prices have slightly weakened in several instances. Hickory is distinctly weaker. Some parcels have brought only 2/7 and even 2/6, while as high a price as 3/- has been realized. Ash lumber is a good point. Prime stocks are going very well and No. 1 common stock has sold better than has been the case for some time. It is a pity with No. 1 common white ash that shippers do not send the stocks 6" and up to

10s market instead of 4" and up. They would do better with it. Birch is also in demand. Walnut is also in demand. The market is generally optimistic and business will soon pick up.

TIMBER ESTIMATES

REPORTS INCLUDING
TOPOGRAPHICAL MAP, TYPICAL ESTIMATES & WRITTEN REPORT

GARDNER & HOWE

ENGINEERS

Clarence W. Griffith Department Manager, Memphis, Tenn.
Porter Building.

Kentucky Lumber Company

MANUFACTURERS

POPLAR, PLAIN AND QUARTERED OAK, RED AND SAP GUM, ASH, CHESTNUT, BASSWOOD, HEMLOCK, WHITE PINE

Mills at
Burnside, Ky. Williamsburg, Ky.
Isola, Miss.

Sales Office
Cincinnati, O.

CINCINNATI Hardwood Manufacturers and Jobbers

C. CRANE & CO.

MANUFACTURERS HARDWOOD LUMBER
1739 EASTERN AVENUE

CONASAUGA LUMBER CO.

MANUFACTURERS HARDWOOD AND PINE
FOURTH NATIONAL BANK BUILDING

POPLAR SPECIALISTS

We have always made a distinct specialty of Poplar, Rough and Milled. Have 3,000,000 feet nice, dry stock at Cincinnati now, and some at our mills.

CAN WE SERVE YOU?

THE M. B. FARRIN LUMBER CO.

Richey, Halsted & Quick

HIGH GRADE SOUTHERN LUMBER

E. C. BRADLEY LUMBER CO.

HIGH GRADE WEST VIRGINIA HARDWOODS
GOERKE BUILDING

Johns, Mowbray, Nelson Company

OAK, ASH, POPLAR & CHESTNUT
GUM AND COTTONWOOD

Results Eighth Fiscal Year

OF THE

LUMBERMEN'S UNDERWRITING ALLIANCE

Operating Expenses.....	20%
Fire Losses.....	22%
Saved to Subscribers.....	58%

READY RESOURCES

Cash in Banks	\$514,721.36
Gilt-edged Bonds	256,361.75
Premium Deposits in course of collection.....	100,169.32
Total	<u>\$871,252.43</u>

It is now fairly well understood that the dominant purpose of the ALLIANCE is to PREVENT FIRES. It is through fire prevention that we have been able to return Subscribers substantial CASH DIVIDENDS on insurance premiums. The owners of eligible plants not carrying our policies are missing the safeguarding influence of our Inspection and Fire Bulletin Service, and are undoubtedly paying more than is necessary for less adequate protection.

Write for our requirements. Possibly if your plant is not eligible it can be made so at a reasonable expenditure which the decrease in insurance rates will partially or wholly reimburse.

U. S. EPPERSON & COMPANY

ATTORNEY AND MANAGER

1101 to 1105 R. A. LONG BUILDING

KANSAS CITY, MO.

Advertisers' Directory

NORTHERN HARDWOODS.

American Lumber & Mfg. Co.....	12
Beecher & Barr.....	13
Buffalo Hardwood Lumber Co.....	71
Cartier-Holland Lumber Company..	2
Coale, Thos. E., Lumber Company..	13
Cobbs & Mitchell, Inc.....	3
Craig, W. P., Lumber Co.....	13
Curl, Daniel B.....	13
East Jordan Lumber Company.....	64
Elias, G., & Bro.....	71
Estabrook-Skeele Lumber Co.....	4
Flanner-Steger Land & Lumber Co.	4
Forman, Thos., Company.....	64
Goodyear, C. A., Lumber Co.....	70
Hanson-Turner Company.....	66
Heyser, W. E., Lumber Co.....	11
Holyoke, Chas.....	12
Holloway Hardwood Lumber Co....	2
Jones Hardwood Company.....	13
Kent, J. S., Company.....	12
Klann, E. H.....	57
Kneeland-Bigelow Company, The...	3
Litchfield, William E.....	13
McIlvain, J. Gibson, & Co.....	2
McLean, Hugh, Lumber Co.....	71
Miller, Anthony.....	71
Mitchell Bros. Company.....	3
Mowbray & Robinson Company.....	11
Osgood & Richardson.....	57
Palmer & Parker Co.....	12
Sawyer-Goodman Company.....	70
Smith, Fred D.....	57
Standard Hardwood Lumber Co.....	71
Stearns Salt & Lumber Company...	9
Stephenson, I., Company, The.....	64
Stewart, I. N., & Bro.....	71
Stimson, J. V., & Co.....	68
Struthers Cooperage Company.....	64
Sullivan, T., & Co.....	71
Taylor, W. R., Lumber Company....	12
Tegge Lumber Co.....	52
Vinke, J. & J.....	13
VonPlaten Lumber Co.....	64
Webster, George, Lumber Company.	13
White, Wm. H., Co.....	72
Wiggin, H. D.....	12
Williams, Ichabod T., & Sons.....	14
Willson Bros. Lumber Company.....	12
Wistar, Underhill & Nixon.....	12
Wood-Mosaic Company.....	13
Yeager, Orson E.....	71
Young, W. D., & Co.....	3

POPLAR.

Anderson-Tully Company.....	9
Atlantic Lumber Company.....	53
Farrin, M. B., Lumber Company.....	14
Faust Bros. Lumber Company.....	53
Keys-Walker Lumber Company.....	6
Logan, J. M., Lumber Co.....	6
Maphet & Shea Lumber Company...	6

Radina, L. W., & Co.....	11
Swann-Day Lumber Company.....	52
Vansant, Kitchen & Co.....	72
West Virginia Timber Company.....	7
Whiting, Wm. S.....	69
Wood, R. E., Lumber Company.....	13
Yellow Poplar Lumber Company.....	72

SOUTHERN HARDWOODS.

American Lumber & Mfg. Co.....	12
Anderson-Tully Company.....	9
Atlantic Lumber Company.....	53
Baker-Matthews Mfg. Co.....	69
Bennett & Witte.....	11
Black, Fred W., Lumber Co.....	49
Bluestone Land & Lumber Co.....	52
Boice Lumber Company.....	68
Booker-Cecil Company.....	5
Bradley, E. C., Lumber Company.....	53
Brown, W. P., & Sons Lumber Co...	5
Buffalo Hardwood Lumber Co.....	71
Carrier Lumber & Mfg. Co.....	14
Cherokee Lumber Co.....	7
Coale, Thos. E., Lumber Company.....	13
Conasauga Lumber Company.....	53
Crane, C., & Co.....	53
Curl, Daniel B.....	13
Davis, Edward L., Lumber Company	5
Dempsey, W. W.....	69
Duhlmeier Brothers.....	11
Elias, G., & Bro.....	71
Estabrook-Skeele Lumber Co.....	4
Farrin, M. B., Lumber Company.....	53
Faust Bros. Lumber Co.....	14
Flanner-Steger Land & Lumber Co.	4
Garetson-Greaseon Lumber Co.....	69
Heyser, W. E., Lumber Company...	11
Hill Brothers Tie & Lumber Co.....	69
Himmelberger-Harrison Lumber Co.	69
Holloway Hardwood Lumber Co.....	2
Huddleston-Marsh Lumber Co.....	4
Jones Hardwood Company.....	13
Johns-Mowbray-Nelson Company..	53
Kennedy, James, & Co.....	52
Kent, J. S., Company.....	12
Kentucky Lumber Company.....	53
Keys-Walker Lumber Co.....	6
Kimball & Kopcke.....	57
Klann, E. H.....	57
Kosse, Shoe & Schleyer Company...	52
Lamb-Fish Lumber Co.....	8
Litchfield, William E.....	13
Littleford, George.....	32
Little River Lumber Company.....	72
Logan, J. M., Lumber Co.....	6
Louisiana Long Leaf Lumber Co...	68
Louisville Point Lumber Company..	5

Maley, Thompson & Moffett Co.....	11
Maphet & Shea Lumber Company...	6
McIlvain, J. Gibson, & Co.....	2
McLean, Hugh, Lumber Co.....	71
Miller, Anthony.....	71
Mowbray & Robinson Company.....	11
Norman Lumber Company.....	5
Ohio River Saw Mill Company.....	5
Osgood & Richardson.....	57

Paepoke-Leicht Lumber Company...	7
Radina, L. W., & Co.....	11
Ransom, J. B., & Co.....	72
Riemer Lumber Company.....	72
Richey, Halsted & Quick.....	53
Russe & Burgess, Inc.....	14

Salt Lick Lumber Company.....	68
Shawnee Lumber Company.....	52
Shiels, Chas. F., & Co.....	52
Slaymaker, S. E., & Co.....	50
Smith, Fred D.....	57
Standard Hardwood Lumber Co.....	71
Stewart, I. N., & Bro.....	71
Stimson, J. V., & Co.....	68
Sullivan, T., & Co.....	71
Swann-Day Lumber Company.....	52

Vestal Lumber & Manufacturing Co.	6
Vinke, J. & J.....	13
Von Platen Lumber Co.....	64

Webster, George, Lumber Company.	13
West Virginia Timber Company.....	7
Whiting, Wm. S.....	69
Whitmer, Wm., & Sons.....	12
Wiggin, H. D.....	12
Williams, Ichabod T., & Sons.....	14
Willson Bros. Lumber Company.....	12
Wistar, Underhill & Nixon.....	12
Wood-Mosaic Company.....	13
Wood, R. E., Lumber Company.....	13

Yeager, Orson E.....	71
----------------------	----

VENEERS AND PANELS.

Adams & Raymond Veneer Co.....	67
Ahnapee Veneer & Seating Co.....	66
Astoria Veneer Mills & Dock Co....	67
Black, Fred W., Lumber Co.....	49
Central Veneer Company.....	65
Hanson-Turner Company.....	66
Hoffman Bros. Company.....	65
Huddleston-Marsh Lumber Co.....	4
Jarrell, B. C., & Co.....	68
Kentucky Veneer Works.....	64
Kiel Wooden Ware Company.....	66
Knoxville Veneer Company.....	6
Louisville Veneer Mills.....	5
Maley, Thompson & Moffett Co.....	11
Memphis Veneer & Lumber Co.....	65
Mengel, C. C., & Bro. Company.....	5
Ohio Veneer Company.....	52
Penrod Walnut & Veneer Co.....	65
Putnam Veneer and Lumber Co.....	67
Rayner, J.....	4
Rice Veneer & Lumber Company...	67
Southern Veneer Manufacturing	65
Company.....	67
Underwood Veneer Company.....	67
Veneer Manufacturers' Company...	4
Walker Veneer & Panel Co.....	57
Willey, C. L.....	51
Williams, Ichabod T., & Sons.....	14
Wisconsin Seating Company.....	66
Wood-Mosaic Company.....	13

MAHOGANY, WALNUT, ETC.

Astoria Veneer Mills & Dock Co....	67
Black, Fred W., Lumber Co.....	49
Duhlmeier Brothers.....	2
Huddleston-Marsh Lumber Co.....	71
Littleford, George.....	32
Maley, Thompson & Moffett Co.....	11
Memphis Veneer & Lumber Co.....	65
Mengel, C. C., & Bro. Company.....	5
Palmer & Parker Co.....	12
Penrod Walnut & Veneer Co.....	65
Purcell, Frank.....	69

Rayner, J.....	4
Struthers Cooperage Company.....	64
Willey, C. L.....	51
Williams, Ichabod T., & Sons.....	14

HARDWOOD FLOORING.

Beecher & Barr.....	13
Carrier Lumber & Mfg. Co.....	14
Cobbs & Mitchell, Inc.....	3
Eastman, S. L., Flooring Co.....	64
Farrin, M. B., Lumber Company.....	53
Forman, Thos., Company.....	64
Kerry & Hanson Flooring Co.....	64
Louisiana Long Leaf Lumber Co...	68
Mitchell Bros. Company.....	3
Salt Lick Lumber Company.....	68
Stearns Salt & Lumber Company...	9
Stephenson, I., Company, The.....	64
Webster Lumber Co., George.....	13
White, Wm. H., Co.....	72
Wilce, T., Company, The.....	4
Young, W. D., & Co.....	3

WOODWORKING MACHINERY.

Cadillac Machine Co.....	59
Linderman Machine Co., The.....	12
Merston, W. B., & Co.....	12
Phoenix Manufacturing Co.....	14
Saranac Machine Company.....	59
Steinmetz, C. M.....	12
Westinghouse Electric & Mfg. Co..	63

LOGGING MACHINERY.

Baldwin Locomotive Wks.....	61
Clyde Iron Works.....	63
Lidgerwood Mfg. Co.....	59
Russel Wheel & Foundry Co.....	60

DRY KILNS AND BLOWERS.

Grand Rapids Veneer Works.....	64
Kraetzer Company, The.....	49
Phila. Textile Mch. Co.....	12

SAWS, KNIVES AND SUPPLIES.

Atkins, E. C., & Co.....	62
Simonds Mfg. Co.....	61

LUMBER INSURANCE.

Central Manufacturers' Mut. Ins. Co.	50
Epperson, U. S.....	54
Indiana Lumbermen's Mut. Ins. Co..	50
Lumber Mutual Fire Insurance Co..	50
Lumbermen's Mutual Ins. Co.....	50
Lumbermen's Underwriting Alli-	54
ance.....	14
Lumber Underwriters.....	14
Pennsylvania Lumbermen's Mutual	50
Fire Ins. Co.....	50
Rankin, Harry & Co.....	

TIMBER LANDS.

Lacey, James D., & Co.....	50
Spry, John C.....	13

TIMBER ESTIMATORS

Griffith, Clarence W.....	53
McDonald, Thos. J.....	56

MISCELLANEOUS.

Astoria Veneer Mills & Dock Co....	67
Childs, S. D., & Co.....	57
Gerlach, The Peter, Company.....	57
Kraetzer Company, The.....	48
Lumbermen's Credit Association...	68
Mechanical Rubber Company.....	61
Tamms Silica Company.....	57
Wausau Advancement Association..	65
Westinghouse Electric & Mfg. Co...	63

CLASSIFIED ADVERTISEMENTS

Advertisements will be inserted in this section at the following rates:

For one insertion.....20c a line
For two insertions.....35c a line
For three insertions.....50c a line
For four insertions.....60c a line

Eight words of ordinary length make one line. Heading counts as two lines. No display except the headings can be admitted.

Remittances to accompany the order. No extra charges for copies of paper containing the advertisement.

EMPLOYMENT WANTED

VENEER AND LUMBER SALESMAN.

Competent and experienced veneer and lumber salesman is open for a position on the road, or at the mill. Address

"BOX 34," care HARDWOOD RECORD.

WANTED—EMPLOYMENT

When you want a salesman for New York state territory, write us. We can supply you with a good man. EMPIRE STATE ASSOCIATION of Wholesale Lumber & Sash & Door Salesmen. Chas. Johnson, Sec'y, 96 Kirkland Rd., Rochester, N. Y.

TIMBER ESTIMATING

TIMBER ESTIMATES

Estimating Southern timber a specialty. Maps, detailed reports as to stand, quality and logging conditions. Have a few high-class properties for sale. Can furnish best references.

THOS. J. McDONALD,
East Tenn. Natl. Bank Bldg.,
Knoxville, Tenn.

WAGON STOCK WANTED

I AM IN THE MARKET FOR

75 to 100 cars of oak poles, bolsters, sand boards, eveners, and reaches; and hickory and maple axles. Will inspect at shipping point, and pay cash. E. B. BROWN, 372 Bayne St., Buffalo, N. Y.

WAGON STOCK FOR SALE

FOR SALE—HICKORY RIM STRIPS.

25,000 ft. 1½x1½ and 1½x1½x6 and 7' long. 12,000 pcs. 1½x1½x36" long. 1 car 1x1x48" long cull golf sticks.

I want to sell the output of my mill for the coming summer, sawing oak wagon stock, etc. W. I. NORRIS, Fairview, Ark.

LOGS WANTED

WANTED—BLACK WALNUT LOGS

500 cars good black walnut logs, 10" and up in diameter, 6 ft. and up long. Will inspect at shipping point and pay cash.

GEO. W. HARTZELL, Dayton, Ohio.

WANTED—HARDWOOD LOGS

200,000 ft. 28" and up White Oak logs.
200,000 ft. 12" and up Walnut logs.
50,000 ft. 12" and up Cherry logs.
C. L. WILLEY, 2558 S. Robey St., Chicago.

TIMBER LANDS FOR SALE

FOR SALE—BY THE OWNER

30,000,000 ft. hardwood. 75% red gum, balance mixed oak, cypress, ash and elm. This is a bona fide proposition. R. R. within ½ mile of the timber. Water transportation available. BOX 371, Memphis, Tenn.

FOR SALE—15 MILLION FEET CYPRESS

A tract of extra large choice cypress. Have detail cruise. Located on navigable river and trunk line of railroad. Near deep water port. Address, OWNER, Box 512, Brunswick, Ga.

TIMBER SALE!

20 acres; extra good. Bids opened March 26, Union National Bank, Muncie, Indiana. Address WILLIAM W. SPANGLER, Auburn Jct., Ind.

ARE YOU INTERESTED IN GUM and Red Oak?

I own in fee simple two small and carefully selected tracts of high-class gum and red oak stumpage. Will sell at price to make the buyer good money either as an investment or as an operating proposition.

Will deal with principals only. Address in confidence, "BOX 22," care HARDWOOD RECORD.

TIMBER INVESTORS

One hundred pieces timber located all parts United States. For complete list, write J. J. CRANDALL & SON, Wellsville, N. Y.

TIMBER WANTED

WANTED—CROSS TIES

for treatment, 7" thick, 8½' long, sawed, pole and hewn. Red, pin, black, yellow oaks, hard maple and birch. For further particulars write

R. A. BURY, Asst. Gen. Tie Agent,
N. Y. C. Lines, Detroit, Michigan.

LUMBER FOR SALE

MICHIGAN MAPLE

130 M 6/4 all grades Hard Maple.
57 M 8/4 all grades Hard Maple.
65 M 6/4 No. 1 common & better Soft Maple.
10 M 8/4 No. 1 common & better Soft Maple.
Band sawed, dry stock; good lengths and widths. Write for delivered prices.
THE BROWNLEE-KELLY CO., Detroit, Mich.

OAK, POPLAR, ASH

and all other hardwoods, in all grades and thicknesses, can be readily sold if advertised in the Wanted and For Sale section of HARDWOOD RECORD. If you have a large stock you want to sell try a few lines in this department and see what a lot of inquiries they will bring you.

DIMENSION STOCK FOR SALE

FOR SALE

CLEAR GUM SQUARES.

2,000 pieces 2x2—20".
2,500 pieces 2x2—24".
400 pieces 2x2—28".
5,000 pieces 2x2—32".
2,000 pieces 2x2—36".

CLEAR OAK SQUARES.

300 pieces 2x2—24".
700 pieces 2x2—32".
1,100 pieces 2x2—48".
Gum squares @ \$14.00 per M ft. F.O.B. my mill.
Oak squares @ \$17.00 per M ft. F.O.B. my mill.
This stock has been on sticks from 2 to 8 months. J. G. OPITZ, Haskell, Ark.

DIMENSION STOCK WANTED

WANTED

DIMENSION OAK

Plain and Quartered

Various sizes for chair and table factories.

Send to us for specifications and prices.

INDIANA QUARTERED OAK CO.

7 East 42nd Street,
New York.

LUMBER WANTED

WANTS RED AND WHITE OAK

A Canadian manufacturing company is in the market for a quantity of plain Red and White and quarter-cut White Oak, 3/4 to 8/4, and will contract for entire cut in these woods in No. 2 common and better grades from either small or large mills. Send particulars of quantity and where located, and best price f. o. b. cars at shipping point. Address, "BOX 24," care HARDWOOD RECORD.

WANTED

100,000 feet 3" FAS and No. 1 com. Hard Maple, green or dry. Box 457, South Bend, Ind.

WANTED

Hickory in car lots. Suitable for making handles. Specify percentage of white wood, and quote price to ST. MARYS WOOD SPECIALTY CO., LIMITED, St. Marys, Ontario, Canada.

BUYERS OF HARDWOODS.

Do you want to get in touch with the best buyers of hardwood lumber? We have a list, showing the annual requirements in lumber, dimension stock and veneers and panels of consumers of those materials throughout the United States and Canada. The service is free to advertisers in the Record. It will interest you. Write us for further information about our "Selling Lumber by Mail System."

HARDWOOD RECORD, Ellsworth Bldg.,
Chicago.

WANTED—BLACK WALNUT LOGS AND LUMBER

Good sound walnut logs 14" and over in diameter, either hewed or rough. Will inspect and pay cash at shipping point. J. W. COMLEY, Exporter, Steubenville, Ohio.

STOCK WANTED

Quote delivered Philadelphia, Pa.

- 4 4 White Pine Box
- 4/4 No. 1 common Oak
- 8 4 No. 1 common Oak
- 4 4 No. 1 common Oak
- 4 4 No. 2 common Oak

Make delivered prices on any stock you desire to move.

CHARLES C. CROSS,
Philadelphia, Pa.

WHITE OAK WANTED

3,000 ft. 4" thick, any length that will divide by 30". Can not use any other kind. No. 2 common and better, dry or as near dry as possible. Address

"BOX 33," care HARDWOOD RECORD.

WANTED

A few cars 4 4" 1sts and 2nds soft gray elm, either green or dry.

200,000 ft. 8/4" No. 1 common and better hard maple. Quote price, with detailed description of stock. Address

"BOX 32," care HARDWOOD RECORD.

10,000 PIECES CLEAR OAK WANTED
1x6x20" or multiple of 20", kiln-dried, full 6" wide and 1" thick rough, for prompt shipment to Grand Rapids, Mich. Address

"BOX 30," care HARDWOOD RECORD.

WANTED

White Oak, hewn and sawn, also ship plank. Address G. ELIAS & BRO. for further particulars, 965 Elk Street, Buffalo, N. Y.

BUSINESS OPPORTUNITIES**TO LET LOGGING CONTRACT**

on 3,600 acres of hardwood timber close to railroad. Attractive proposition to right parties.

Address "BOX 31," care HARDWOOD RECORD.

LOOK—LOOK—LOOK

For Sale—A Model Furniture Factory at a bargain price. The property is located in the thriving city of Poughkeepsie; is now being used as a chair factory; is fully equipped with wood-working machinery and in good condition. Will be sold as a going business or otherwise as purchaser may desire. Apply direct to KAAL ROCK CHAIR CO., P. O. Box 378, Poughkeepsie, N. Y.

EXCELLENT OPPORTUNITY

for man to go in manufacturing business. Have well-equipped hardwood factory suitable for making spokes and vehicle stock. Healthy location in town six thousand, on two rivers and two railroads. Address

"BOX 72," care HARDWOOD RECORD.

MACHINERY FOR SALE**FOR SALE**

- One Egan tenoner.
- One router.
- One combination rip and cut-off saw.
- One vertical 4 spindle boring machine.
- One arm disc sanding machine.
- One automatic turning lathe.
- One 24" pony planer.
- One 30" jointer.

UNITED REFRIGERATOR & ICE MACHINE CO., Purchasing Department, Kenosha, Wis.

BOILERS FOR SALE

1. Good second hand
x14", 4" tubes. Will sell reasonable.
E. W. PRATT, JR., Hopkinsville, Ky.

FOR SALE

- 1 Berlin band resaw No. 284.
- 1 Jointer attachment for same
- 1 Berlin double surfacer No. 177.
- 1 Berlin single inside moulder No. 15.
- 1 Berlin twin matcher No. 46.
- 1 Circular bevel siding resaw, Fay & Egan No. 1.
- 1 Fay & Egan 9" outside moulder No. 181.
- 1 8" Smith inside moulder.

The above machinery all in strictly first-class condition and modern. Offering for sale on account of change in our product. Will be sold cheap for cash. For further particulars address YELLOW POPULAR LBR. CO., Coal Grove, O.

MACHINERY WANTED**WE ARE IN THE MARKET FOR**

a used D C generator between 200 and 300 K V A, 440 V 3 phase, 60 cycle A C current for early delivery. Give full description, photo and best price.

HEINEMAN LUMBER COMPANY, Merrill, Wis.

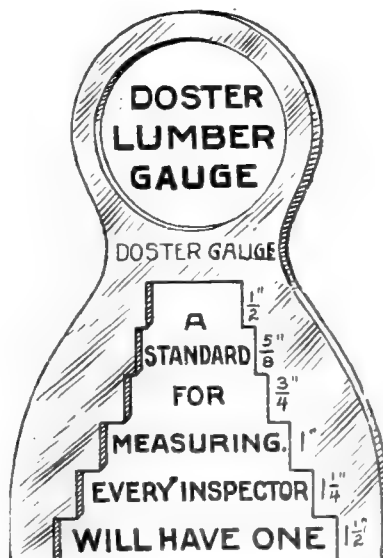
MISCELLANEOUS**WANTED—HARDWOOD LUMBERMEN—**

to try the Gibson Tally Book. The three-throw aluminum tally ticket cover accommodates any form of ticket desired. The use of the special triplicate tally ticket supplied, printed on waterproof paper with carbon backs makes tallies unalterable. For durability, convenience, accuracy and for systematizing the inspection of lumber the Gibson tally method can't be beat.

Special forms of tally tickets mailed on application. Covers sold on approval to responsible concerns.

HARDWOOD RECORD,

537 So. Dearborn St., Chicago.



For sale by HARDWOOD RECORD,
537 S. Dearborn St., Chicago, Ill.
50 CENTS EACH.

CHICAGO**FRED D. SMITH
HARDWOOD LUMBER**

1337-1343 North Branch St. CHICAGO

E. H. KLANN

Northern and
Southern Hardwoods, and
Yellow Pine

819 FISHER BLDG.

HAR. 1187

Osgood & Richardson
935 Peoples Gas Bldg.

NORTHERN AND SOUTHERN
HARDWOODS

Chicago Agents: LAMB-FISH LUMBER CO.

Telephone Canal 1688

**CHAS. DARLING & CO.
HARDWOOD LUMBER**

22nd Street and Center Avenue

CHICAGO



99% PURE
SILICA
OR SILEX FOR WOOD FILLERS
TAMMS SILICA CO., 19 So. 5th Ave., Chicago

Gerlach Modern Machines
Produce the Cheapest and Best
COOPERAGE STOCK
and **BOX SHOOKS**
Circular, Band and Cylinder Saws
SAW AND LOG TOOLS
THE PETER GERLACH CO., Cleveland, 6th City, U.S.A.

COUNTERFEIT CHECKS

are frequent
except where
our

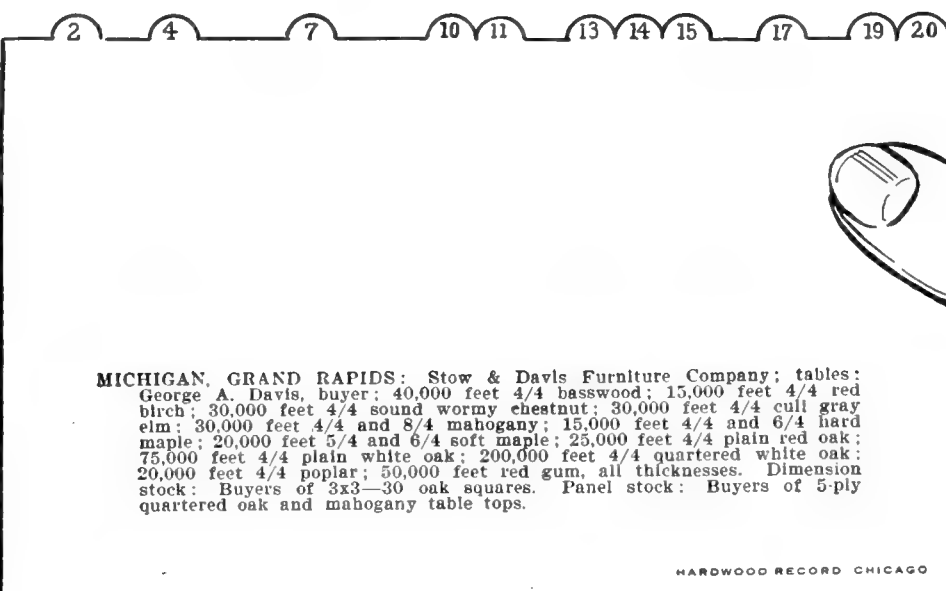
Two Piece
Geometrical
Barter Coin
is in use, then
imitation isn't
possible.
Sample it you
ask for it.

S. D. CHILDS
& CO.
Chicago

We also make
Time Checks,
Stencils and
Log Hammers.



Doesn't It Look Good To You?



MICHIGAN, GRAND RAPIDS: Stow & Davis Furniture Company; tables: George A. Davis, buyer; 40,000 feet 4/4 basswood; 15,000 feet 4/4 red birch; 30,000 feet 4/4 sound wormy chestnut; 30,000 feet 4/4 cull gray elm; 30,000 feet 4/4 and 8/4 mahogany; 15,000 feet 4/4 and 6/4 hard maple; 20,000 feet 5/4 and 6/4 soft maple; 25,000 feet 4/4 plain red oak; 75,000 feet 4/4 plain white oak; 200,000 feet 4/4 quartered white oak; 20,000 feet 4/4 poplar; 50,000 feet red gum, all thicknesses. Dimension stock: Buyers of 3x3—30 oak squares. Panel stock: Buyers of 5-ply quartered oak and mahogany table tops.

HARDWOOD RECORD CHICAGO

Specimen of one of the thousands of patented tabbed index cards involved in Hardwood Record's copyrighted Information Service, showing annual requirements for Lumber, Dimension Stock, Veneers and Panels employed by wholesalers and hardwood manufacturing consumers throughout the United States and Canada.

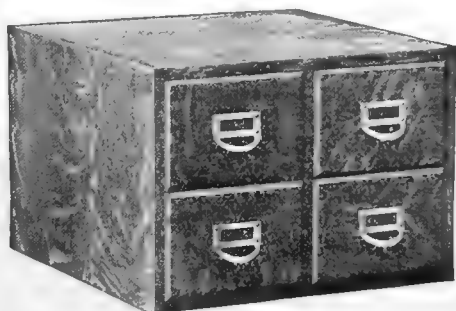


Illustration of Oak Cabinet in which this Information Service is filed.

ILLINOIS

Key

1	Ash	12	Hickory
2	Basswood	13	Mahogany
3	Beech	14	Maple
4	Birch	15	Oak
5	Butternut	16	Walnut
6	Cherry	17	Poplar
7	Chestnut	18	Miscellaneous including Dogwood, Holly, Locust, Persimmon, Sycamore.
8	Cottonwood	19	Dimension stock
9	Cypress	20	Veneers and panel stock
10	Elm		
11	Gum		

Fac-simile of state key card between which the tabbed information cards are filed alphabetically by towns, by means of which instant reference can be made to the buyers of any kind of wood, in any locality in the United States and Canada.

THIS service is comprised in more than fifty bulletins, and additional bulletins of corrections and additions are printed frequently.

This service is kept positively up-to-date, and is indispensable to lumber and veneer sales departments.

It is an exclusive service disposed of only to HARDWOOD RECORD advertisers.

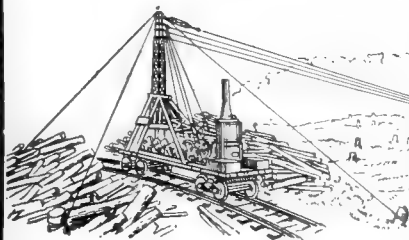
LET US TELL YOU ABOUT THE MODERATE COST

Hardwood Record, 537 South Dearborn Street, Chicago

The CHEAPEST HARDWOOD LOGGING

IS DONE WITH

LIDGERWOOD CABLEWAY SKIDDERS



LIDGERWOOD MFG. CO.
96 Liberty Street, New York

Branch Offices
CHICAGO, SEATTLE
Agencies
NEW ORLEANS-WOODWARD, WIGHT & CO. LTD.
CANADA-ALLIS CHALMERS BULLOCK LTD.
MONTREAL VANCOUVER

Corrugated Joint Fasteners

Can be quickly and
cheaply driven with

"ADVANCE" CORRUGATED JOINT FASTENER MACHINE

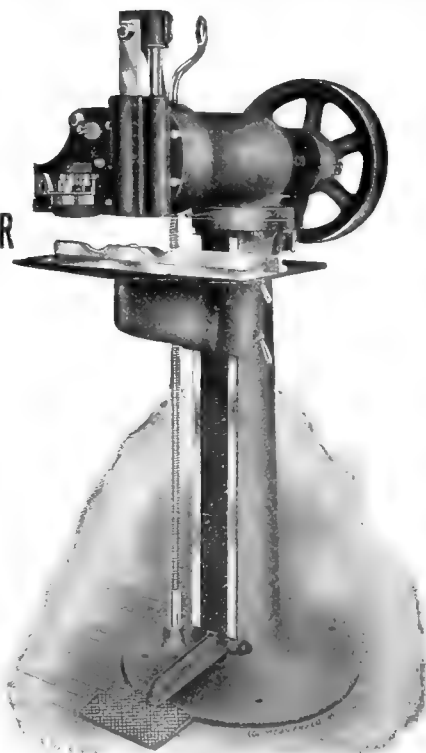
Made in Different
Types to Meet
All Conditions

Specially suitable for
manufacturers of
sash, doors, blinds,
screens, coffins,
furniture, plumbers'
wood-work, porch
columns, boxes,
refrigerators, etc.

Write for bulletins
and prices.

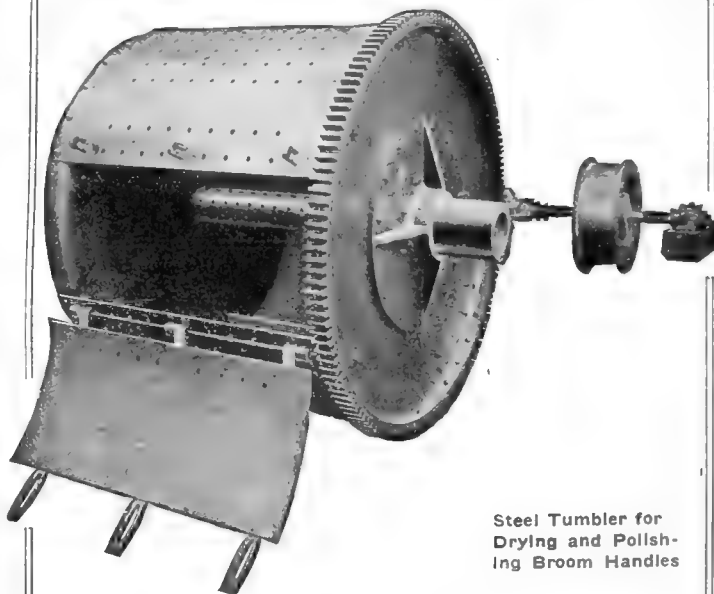
Manufactured only
by

Saranac Machine Co., Benton Harbor, Mich.



Broom Handle Machinery

Let us tell you about our **STEEL TUMBLERS FOR DRYING AND POLISHING BROOM HANDLES**. This system is rapidly supplanting all others. More economical; less time required for drying; no polishing afterwards; greater per cent of straight handles turned out.



Steel Tumbler for
Drying and Polish-
ing Broom Handles

CADILLAC MACHINE COMPANY

Complete Line of Broom Handle Machinery

CADILLAC, MICH.

IF YOU HAVEN'T SEEN THE GIBSON TALLY BOOK

Let us send you one on approval, with samples of Tally Tickets for triplicate, duplicate or single tallies—a score of forms to choose from. They are the latest and best. Endorsed by hundreds of lumber manufacturers and buyers.

HARDWOOD RECORD

CHICAGO



THE RUSSEL COMBINED SKIDDER AND LOADER IN OPERATION

Russel Logging Cars are built to stand severe service, of any capacity desired or to suit any length of log.

Logging Economy will interest you

The most convincing proof of any machine's efficiency, next to a personal trial, is the expression of those who have used them.

We shall be pleased to furnish you with the proofs or the names of the operators who will be glad to show you the machines in operation.

The Russel Combined Skidder and Loader has demonstrated itself to be superior in design and construction. The great decrease in cost and increased efficiency of logging is bound to appeal to the operators.

Russel Wheel & Foundry Co., Detroit, Mich.

**IF YOU WANT THE BEST SYSTEM OF ACCURATELY TALLYING AND
RECORDING LUMBER SHIPMENTS OR RECEIPTS**

YOU WILL BE INTERESTED IN

The Gibson Tally Book

This system of tallying lumber is employed by more than two thousand lumber producers, jobbers and wholesale consumers, and is available for tallying lumber, logs, flooring, dimension stock and all other commodities.

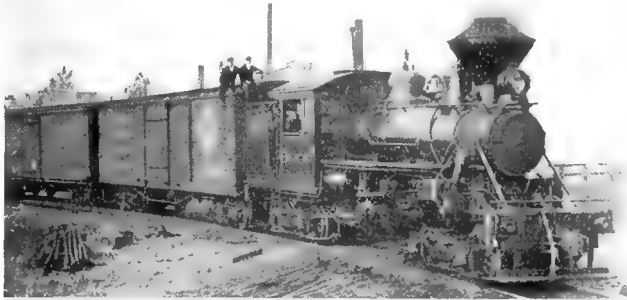
Makes three original tallies without the use of loose carbon sheets.

New Catalogue showing twenty-six various forms of tickets sent free on request.

Tally Book Dept., Hardwood Record, Chicago

Baldwin Geared Locomotive

Logging Locomotives must operate on steep grades, sharp curves and uneven tracks. This is what the geared locomotive illustrated has been designed to do. It is symmetrical in construction, and power is transmitted to the axles through a central drive. The valve motion is simple and accessible, and all new features have been tried out in service.



This locomotive is well-designed, well-built and fully guaranteed. Various sizes can be furnished, to suit different track and operating conditions.

THE BALDWIN LOCOMOTIVE WORKS
PHILADELPHIA, PA., U. S. A.

Cable Address:—"Baldwin, Philadelphia"

Branch Offices:

New York, N. Y., Hudson Terminal; St. Louis, Mo., Wright Building;
Chicago, Ill., Railway Exchange; Portland, Ore., Spalding Building;
Richmond, Va., Travelers Building.

SIMONDS SAWS

This illustration suggests just four of the kinds of Saws which may interest you. Our factories manufacture every kind of a Saw used around a wood-working plant or sawmill.



Our aim has always been to supply Saws and Wood-working Machine Knives that will give the maximum service and at the same time do the finest kind of work with the least amount of care. Obtaining these results is the work of experience—and we have been doing it eighty years.

Simonds Manufacturing Company

Fitchburg, Mass.
New York City
Portland, Ore.
Vancouver, B. C.

Chicago, Ill.
New Orleans, La.
San Francisco, Cal.
Lockport, N. Y.

Montreal, Que.
Seattle, Wash.
London, Eng.
St. John, N. B.

ELEPHANT RUBBER BELTING

AIR DRILL AND AIR TOOL

HOSE

STEAM
WATER
SUCTION

EXTRA QUALITY

Recommended for hard service
and guaranteed to do the work

SELLING AGENTS

CRANE COMPANY - ALL BRANCHES
STANDARD EQUIPMENT CO., MOBILE, ALA.
ALBANY MILL SUPPLY CO., ALBANY, GA.



**THE MECHANICAL
RUBBER COMPANY**

(Chicago Rubber Works)

307 W. Randolph Street, CHICAGO
ESTABLISHED 1882



Absolute Uniformity

That's one of the reasons why ATKINS SILVER STEEL INSERTED TOOTH SAWS, Bits and Holders are so popular. You will find no variation in temper, pitch or bevel. The heat treatment is prescribed by the chemist, based upon an analysis of the steel. So that we always secure that perfect degree of hardness and toughness which you require.

ATKINS SILVER STEEL SAWS

Place your next order from your regular source—but specify ATKINS SILVER STEEL SAWS. That's the way to insure getting "The Finest on Earth." Don't be satisfied with any other brand. We absolutely guarantee the best results. We make good.

Atkins Always Ahead!

Silver Steel Band Saws, Circular Saws, Cross Cut Saws, Gang Saws
A PERFECT SAW FOR EVERY PURPOSE

ATKINS MACHINE KNIFE FACTORY
Lancaster, N. Y.

The Largest Exclusive Knife Making Plant in the World. A Specialty of High Speed Thin Knives.

E. C. ATKINS & CO., Inc. The Silver Steel Saw People Home Office and Factory, INDIANAPOLIS, IND.
Canadian Factory, Hamilton, Ont.

ATLANTA
CHICAGO

Branches carrying complete
MEMPHIS
MINNEAPOLIS

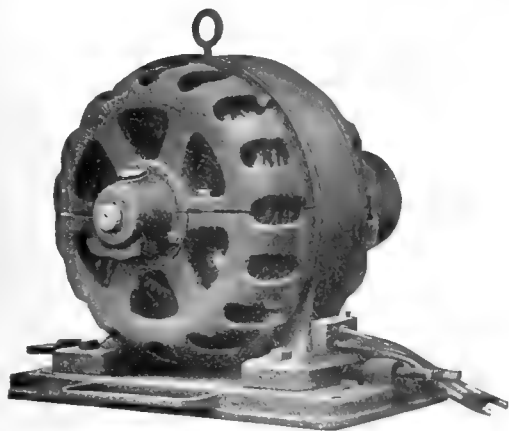
NEW ORLEANS
NEW YORK CITY

PORTLAND, ORE.
SAN FRANCISCO

Address E. C. ATKINS & CO.
SEATTLE
VANCOUVER, B. C.

SYDNEY, N. S. W.

Westinghouse Motors form the Reliable Drive for Wood-Working Plants



AFTER Westinghouse motors are properly installed in a wood-working plant, the only attention they require is an occasional cleaning, inspection and lubrication. Beyond this, there is nothing to be done.

They are ready to start any moment they are wanted and they keep the machines they drive in continuous operation until the power is shut off. They are very rarely out of commission for repairs. Their life is very long; some of the first Westinghouse motors are still in successful operation.

Such reliability is the result of long experience in design, thorough study of operating conditions, and great care in manufacture. These factors combine to make Westinghouse motors more reliable than the service conditions, for which they are intended, require.

Of course, like any other machines, these motors must be properly installed. Westinghouse service takes care of this detail by giving full information on the installation of Westinghouse motors in any plant.

To receive full assurance of motor reliability, specify "Westinghouse Motors."

Westinghouse Electric & Mfg. Co., East Pittsburg, Pa.

Sales Offices in all Large Cities.



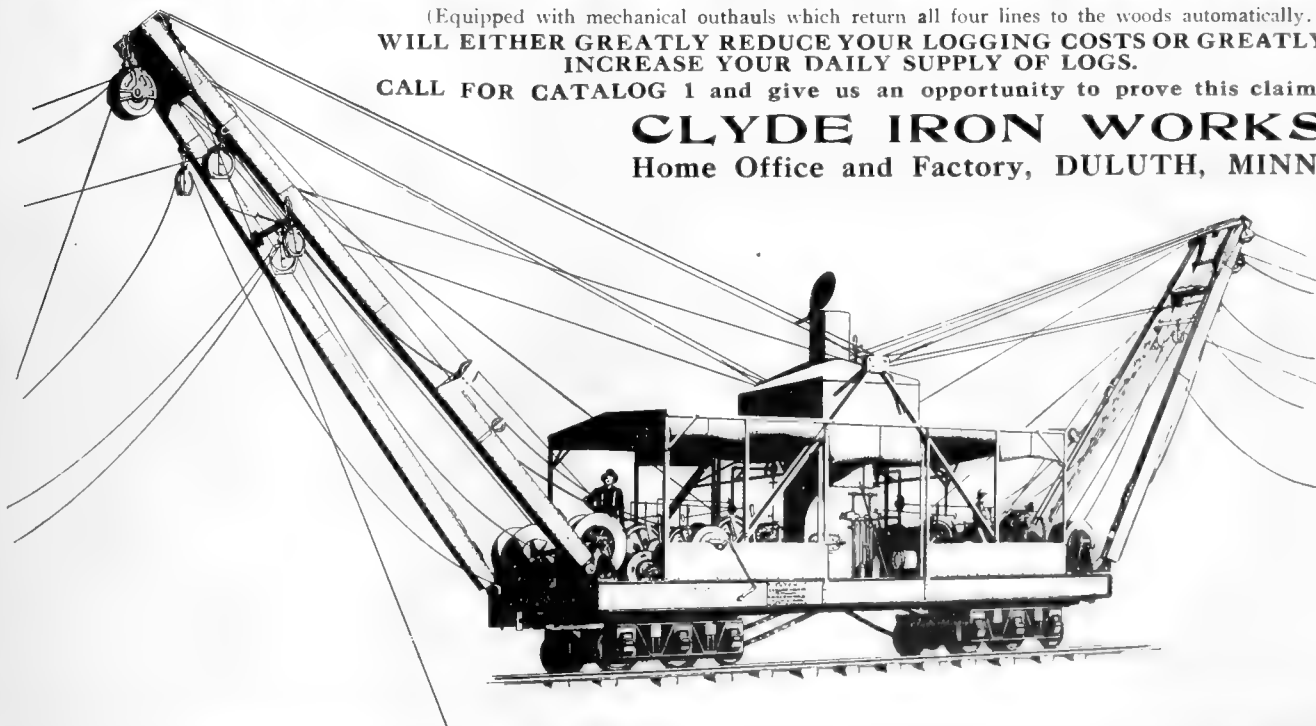
THIS FOUR LINE CLYDE SKIDDER

(Equipped with mechanical outhauls which return all four lines to the woods automatically.)
WILL EITHER GREATLY REDUCE YOUR LOGGING COSTS OR GREATLY INCREASE YOUR DAILY SUPPLY OF LOGS.

CALL FOR CATALOG 1 and give us an opportunity to prove this claim!

CLYDE IRON WORKS

Home Office and Factory, DULUTH, MINN.





M I C H I G A N



FAMOUS FOR HARD MAPLE AND GREY ELM

"Ideal" ^{Steel Burnished} Rock Maple Flooring

is the flooring that is manufactured expressly to supply the demand for the best. It is made by modern machinery from carefully-selected stock and every precaution is taken throughout our entire system to make it fulfill in every particular its name—"IDEAL."

ROUGH OR FINISHED LUMBER—ALL KINDS

Send Us Your Inquiries

The I. Stephenson Company - WELLS, MICHIGAN

"Chief Brand" Maple and Beech Flooring

in $\frac{3}{8}$, $\frac{1}{2}$ and 13-16 and 1 1-16 inch Maple in all standard widths and grades, will commend itself to you and your trade on its merits alone

WRITE US, WE CAN INTEREST YOU

Kerry & Hanson Flooring Co.

GRAYLING, MICHIGAN

We Offer:

800,000 ft. No. 2 and Better Basswood

To be cut during 1913

On hand dry, 30 M 4/4 No. 1 Com. and Better Hard Maple.

LATH
SHINGLESMICHIGAN
HARDWOODSPINE AND
HEMLOCK

East Jordan Lumber Co.

East Jordan, Michigan

MAKERS OF IMPERIAL MAPLE FLOORING

FORMAN'S FAMOUS OAK FLOORING

Is made in faultless fashion from the most uniform-colored and even-textured oak produced; worked from Kraetzer-Cured lumber manufactured at our

Heidelberg, Ky., sawmills.

Thomas Forman Company

Detroit : : : : Michigan

Von Platen Lumber Co.

Iron Mountain, Michigan

MANUFACTURERS OF

BIRCH BASSWOOD ELM MAPLE

100 M Ft. 4/4 No. 1 and 2 Common Birch.

50 M Ft. 5/4 No. 1 Common Birch.

50 M Ft. 5/4 No. 2 Common Birch.

100 M Ft. 5/4 No. 1 and 2 Common Maple.

100 M Ft. 6/4 No. 1 and 2 Common Maple.

We Solicit Your Inquiries

SHIPMENTS VIA C. & N. W.—C., M. & ST. P.—W. & M.

For Prompt Shipment

Basswood—100,000 ft. 5/4 No. 2 Common & Better.
Soft Maple—25,000 ft. 4/4 & 8/4 Log Run M. C. O.
White & Red Oak—12,000 ft. Log Run M. C. O.
Black Walnut—3,000 ft. Log Run M. C. O.

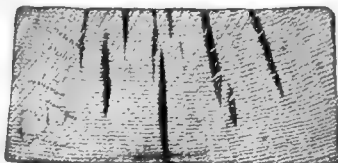
STRUTHERS COOPERAGE CO., Romeo, Michigan

S. L. EASTMAN FLOORING CO.

SAGINAW BRAND

MAPLE FLOORING

SAGINAW, MICH.

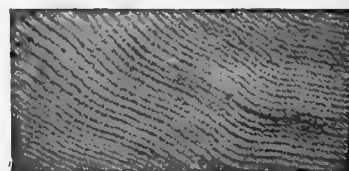


Lumber Dried As Never Before

SEE THE DIFFERENCE

GRAND RAPIDS DRY KILN

GRAND RAPIDS VENEER WKS., SOLE MFRS., MICHIGAN



VENEERS AND PANELS

KANSAS CITY, MO.

HELENA, ARK.

VENEERS

PENROD WALNUT & VENEER COMPANY

General Offices, KANSAS CITY, MO.

Hoffman Brothers Company

Sliced and Sawed, Quartered
and Plain Red and
White Oak

Walnut Cherry Ash Maple

Let us Send You Our Stock List FORT WAYNE, IND.

Memphis Veneer & Lumber Co.
Memphis, Tenn.

Mahogany Veneer

1-8, 3-16 and 1-4-in. door stock.
1-20 and 1-16-in. sawed mahogany.

Sawed Veneer in the following

Quartered White Oak,
Quartered Red Oak,
Plain Red Oak,
Yellow Poplar,
White Ash and
Quartered Red Gum

Memphis Veneer & Lumber Company
Memphis, Tennessee

"SOVEMANCO."

We can furnish anything you want in

Sawed and Sliced Foreign and Domestic Figured Veneers

Capacity 15 million feet per year. Ready to take care of carload orders promptly. Small orders shipped same day received, if desired.

SOUTHERN VENEER MFG. CO., Inc.

Office, 21st and Standard.

LOUISVILLE, KY.

Mills, Magnolia, Standard and 21st Sts.



For items of Hardwood Stock or Hardwood Machinery, you will find it advantageous to write our advertisers. Get in touch!

KENTUCKY VENEER WORKS

ROTARY CUT
GUM, POPLAR, OAK

SAWED AND SLICED
QUARTERED OAK, MAHOGANY

LOUISVILLE, KENTUCKY

The Central Veneer Co.

SOFT YELLOW POPLAR
CROSS BANDING

Huntington, West Virginia

VENEERS AND PANELS

Ahnapee Veneer & Seating Co.

HOME OFFICE, FACTORY AND VENEER MILL, ALGOMA, WIS.
VENEER AND SAWMILL, BIRCHWOOD, WIS.

We manufacture at our Birchwood plant single ply veneers of all native northern woods and deliver stock that is in shape to glue.

From our Algoma factory, where we have specialized for twenty years, we produce panels of all sizes, flat or bent to shape, in all woods, notably in Mahogany and Quarter-Sawn Oak.

We make no two-ply stock, and do not employ sliced cut quartered oak. Our quartered oak panels are all from sawed veneer.

Every pound of glue we use is guaranteed hide stock. We do not use retainers. Our gluing forms are put under powerful screws and left until the glue has thoroughly set.

If you seek a guaranteed product that is the best, based on results accomplished by most painstaking attention and study of every detail, combined with the use of the best stock and an up-to-date equipment, our product will appeal to you.

If you are a "price buyer" we probably cannot interest you.

KIEL WOODEN WARE CO.

WHEN IN THE MARKET FOR ROTARY CUT

BIRCH
BASSWOOD
OAK
ASH
ELM

VENEER

Write Us

WISCONSIN

KIEL
FACTORY AND MAIN
OFFICE

MELLEN
VENEER AND HEADING
MILL



WE manufacture all kinds of panels from the various woods usually used for that purpose.

We lock-joint all our lumber cores, and use every other means of making our product as perfectly as it can be made.

We ask only that you send your inquiries—our stock will almost sell itself after you have seen it.

AUTO DASHES, TOPS and PANELS
CHAIR BACKS and SEATS

THE WISCONSIN SEATING CO., New London, Wis.

HOWARD HANSON, President

THOMAS A. TURNER, Secy. and Treas.

THE HANSON-TURNER COMPANY

MANUFACTURERS OF

ROTARY CUT VENEER AND THIN LUMBER

ELM
BEECH
CURLY BIRCH

OAK
MAPLE

BIRCH
BASSWOOD
BIRD'S-EYE MAPLE

SPECIALTIES:

DRAWER BOTTOMS BACK PANELS CENTER STOCK
BACKING PIANO PIN BLOCKS BIRCH DOOR STOCK
CURLY BIRCH BIRD'S-EYE MAPLE

OFFICE and FACTORY at WELLS, N. Y.

VENEERS AND PANELS

OUR SPECIALTY

Highly Figured Quarter-Sawed White Oak Veneer



PUTNAM VENEER & LUMBER CO.

ROACHDALE, IND.

H. I. CUTSINGER, Gen'l Mgr.

Custom Mill Work, Storage, Inspection

ON

Foreign Fancy Woods, Mahogany, Cedar, Circassian

We receive the logs, store or warehouse them, manufacture them into lumber, cut or saw veneers, pile and store the product, and ship via any railroad. Also furnish inspection returns on logs or lumber. Can furnish accommodations and economies which it is impossible to secure elsewhere. We always have on our yards parcels of plain and figured African, Mexican and Cuban Mahogany, Circassian Walnut and Cedar logs, placed here for sale by direct foreign shippers, from which advantageous purchases can be made.

Astoria Veneer Mills & Dock Co.

Long Island City, New York

Veneers and Panels with a Reputation

WE manufacture Veneers in all the native woods and for all purposes. Also Built-up Panels in native and foreign woods—three and five-ply—and have established a reputation for furnishing high-grade material. Send us your inquiries and orders and become one of our satisfied customers.

Underwood Veneer Co.

Wausau, Wis.

CIRCASSIAN MAHOGANY

Logs **VENEERS** Lumber

WE IMPORT WE MANUFACTURE

All Thicknesses of Mahogany
Ready for Shipment

RICE VENEER & LUMBER CO.
GRAND RAPIDS, MICH.

ESTABLISHED 1869

Adams & Raymond
Veneer Co.

INDIANAPOLIS, INDIANA

MANUFACTURERS

OF

PLAIN & FIGURED
VENEERS

CIRCASSIAN
AMERICAN

WALNUT

QUARTERED OAK

ANY
WOOD

ANY
THICKNESS

THE SOUTH

PROMINENT SOUTHERN MANUFACTURERS

ANY REASONABLE OFFER

6000 feet 3/4" 1s-2s Qrtd. White Oak, 6" & up.
 2700 feet 5/8" No. 2 Com. Qrtd. White Oak.
 5000 feet 5/4" No. 2 Com. Qrtd. White Oak.
 5700 feet 2 1/4" Com. & Bet. Plain White Oak.
 17000 feet 4/4" 1s-2s Qrtd. Poplar.
 7500 feet 4/4" 1s-2s Yellow Poplar 7" & up wide.

WILL BUY THE FOLLOWING STOCK:
 DRY—IN FINE CONDITION

3 cars 4, 4", 6/4", 2", 2 1/2", 3" and 4" Poplar 1s-2s, 20" & up.
 13000 feet 5/4" Common and Better Poplar, 13" & up.
 1 car 2 1/2", 3" and 4" Common and Better Hickory.
 2 cars 4/4" No. 1 Common Walnut.

We, of course, have a complete stock of Quartered and Plain Oak, Poplar and Hickory, etc., in all grades and thicknesses; and will be glad to have your inquiries for anything you may need.

J. V. STIMSON & CO.

OWENSBORO, KY.

Salt Lick Lumber Co.

SALT LICK KENTUCKY

MANUFACTURERS OF

Eureka **Oak Flooring**
OAK AND BEECH

Complete stock of 3/8" and 13/16" in all standard widths

Boice Lumber Co., Inc.

Southern Hardwoods

MAIN OFFICE
 RICHMOND, VIRGINIA

Yards: NORFOLK, ABINGDON, GRAHAM, VA.,
 and NORTH WILKESBORO, N. C.

B. C. JARRELL & CO.

MANUFACTURERS OF

High Grade, Rotary-Cut Gum

VENEERS

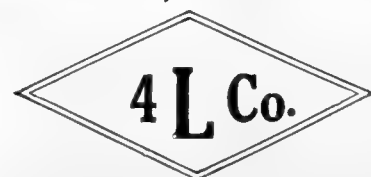
Cut right; dried right; prices right

HUMBOLDT, . TENNESSEE

Louisiana Long Leaf Lumber Co.

Fisher, Louisiana

Diamond



Brand

OAK FLOORING
 A GUARANTEE OF PERFECTION

SAVE YOUR MONEY BY USING THE

RED BOOK Published Semi-annually
 in February and August

It contains a carefully prepared list of the buyers of lumber in car lots, both among the dealers and manufacturers.

The book indicates their financial standing and manner of meeting obligations. Covers the United States, Alberta, Manitoba and Saskatchewan. The trade recognizes this book as the authority on the lines it covers.

A well organized Collection Department is also operated and the same is open to you. Write for terms.

Lumbermen's Credit Assn., ESTABLISHED 1878

608 So. Dearborn St.
 CHICAGO

Mention This Paper.

116 Nassau Street
 NEW YORK CITY

HARDWOOD RECORD is a different kind, and altogether better lumber newspaper than has hitherto been published. This is made possible by the loyal co-operation and support of the hardwood element of the lumber industry. If you are a subscriber you will agree.

THE SOUTH

PROMINENT SOUTHERN MANUFACTURERS

WE MANUFACTURE AND
DEAL IN

TIES, HARDWOOD LUMBER AND TIMBER

We want to buy a large
amount of 4/4, 8'—8'6"
Oak from Tie Sides

Hill Bros. Tie & Lumber Company
Charleston, W. Va.

Baker-Matthews Manufacturing Co.

Sikeston, Mo.

Band Sawn Southern Hardwoods

SPECIALTIES

RED GUM, PLAIN OAK

SEND US YOUR INQUIRIES

GARETSON-GREASON LUMBER CO.

1002-1005 Times Bldg. ST. LOUIS

MANUFACTURERS

Three Mills

Frank Purcell Kansas City U. S. A.

Exporter of Black Walnut Logs



FIGURED WALNUT IN LONG WOOD
AND STUMPS

Our Corps of Inspectors

Intelligent! Highly Trained!
Conscientious!

Is assurance that you will get what your order calls for when you buy Gum from us.

**Himmelberger-Harrison
Lumber Company**

Cape Girardeau, Missouri

William S. Whiting

MANUFACTURER AND WHOLESALE

WHITE PINE
BASSWOOD
BIRCH

BUCKEYE
CHESTNUT
MAPLE

POPLAR
OAK

ASHEVILLE, N. C.

"WE ARE GETTING RESULTS"

WRITES ONE ADVERTISER

This Means That He Is Getting

NEW BUSINESS

Through His Ad

If we can do it for him is there any logical
reason why we can't for you?

MAKE US PROVE IT

HARDWOOD RECORD, CHICAGO

WE HAVE IT

W. W. DEMPSEY

Manufacturer and
Wholesaler of

HARDWOODS

BAND SAWED STOCK

A LINE BRINGS PRICE BY RETURN MAIL

General Offices
Johnstown, Pa.

New York Office
No. 18 Broadway

CHERRY
1 Car 4/4
Log Run
Mill Cull
Out,

OAK
84,000 ft. 4/4
Log Run
Quartered.

CYPRESS
250,000 feet
of 4/4 No. 1
Common &
Better, Old
grading.

SPRUCE
4/4 and 8/4
Clear and
Select, 8/4
Box.

WISCONSIN

WHERE THE FINEST NORTHERN HARDWOODS GROW

WE MANUFACTURE MICHIGAN
HARDWOODS AND HEMLOCK.
MILLS ELECTRICALLY
DRIVEN; STOCK
BAND SAWN

Have in Shipping Condition

BIRCH: NO. 2 AND BETTER, 4/4 to 12/4
ASH: NO. 2 AND BETTER, 4/4 to 12/4
ELM: NO. 2 AND BETTER, 4/4 to 12/4
BASSWOOD: NO. 2 AND BETTER, 4/4
to 12/4

WE are well equipped for manufacturing
special sizes, wagon stock, skids, ties, etc.

THE C. A. GOODYEAR LUMBER COMPANY

Office and Mill
TOMAH, WISCONSIN

Logging Camp
BLUE BILL, MICHIGAN

SAWYER GOODMAN CO.

MARINETTE, WIS.

Mixed Cars of Hardwood, Bass-
wood, White Pine and Hemlock,
Cedar Shingles and Posts

We make a specialty of White Pine Beveled Siding and
White Pine Finish and Shop and Pattern Lumber

Both Ends and the Middle

HARDWOOD RECORD reaches most
everybody who produces mar-
kets and consumes Hardwoods.

Nothing But Hardwoods

A Prominent Veneer Man says:

“I believe your new service showing the exact require-
ments of the Veneer and Panel Trade to be highly accu-
rate, and a necessary part of the office equipment of any
progressive veneer or panel factory.”

The same information would cost you thousands of
dollars. The cost of our service is a small fraction of that.

Ask your competitor to tell you how it has helped him,
and then write us for details.

HARDWOOD RECORD,

CHICAGO, ILL.

BUFFALO

The Foremost Hardwood Market of the East

ANTHONY MILLER
HARDWOODS
OF ALL KINDS
 893 EAGLE STREET

G. ELIAS & BRO.
HARDWOODS
 White Pine, Yellow Pine, Spruce,
 Hemlock, Fir, Lumber, Timber, Mill-
 work, Boxes, Maple and Oak Flooring
 955-1015 ELK STREET

Hugh McLean Lumber Co.
 OUR SPECIALTY:
QUARTERED
WHITE OAK
 940 ELK STREET

I. N. Stewart & Bro.
Specialties
Cherry and Oak
 892 Elk Street

Standard Hardwood Lumber Co.
OAK, ASH and
CHESTNUT
 1075 Clinton Street

BUFFALO HARDWOOD LUMBER CO.
 We want to buy for cash
OAK, ASH AND OTHER HARDWOODS
 All grades and thicknesses.
 Will receive and inspect stock at shipping point.
 Branch yard, Memphis, Tenn.
 940 Seneca Street, **BUFFALO**

T. SULLIVAN & CO.
 SPECIALTIES:
Gray Elm, Brown Ash
 Pacific Coast Fir and Spruce
 2 ARTHUR STREET

ORSON E. YEAGER
 SPECIALTIES:
Oak, Ash and Poplar
 932 ELK STREET

The above firms carry large and well assorted stocks of all kinds and grades of Hardwoods, and have every facility for filling and shipping orders promptly. They will be pleased to have your inquiries.

Vansant,

Manufacturers Old-Fashioned

5-8 and 4-4
in Wide Stock,
Specialty

Kitchen &

Soft
Yellow
Poplar

Ashland, Kentucky

Company

EASTERN REPRESENTATIVE, John L. Cochran
601 W. 115th Street, New York City

YOU pay a *little* more for our hardwood lumber than you do for many others', but it's worth *much* more.

With our modern and first-class equipment and expert operatives, we couldn't make bad lumber if we tried to, because the *quality* and *size* of our virgin tough mountain white ash, red birch, yellow poplar, buckeye, maple, red oak, cherry and basswood, averaging less than three logs to the thousand, and 95 per cent sixteen feet, is the best type of hardwood timber growth in the United States, and shows a larger percentage of *firsts*.

If you are a discriminating buyer, let's get acquainted.

LITTLE RIVER LUMBER COMPANY

Townsend, Tenn.

W. H. White Company Boyne City Lumber Company

Mills and General Office: BOYNE CITY, MICH.

Sales Office: BUFFALO, N. Y.

STOCK DRY—STANDARD GRADES—BEST
MANUFACTURE—CAR OR CARGO SHIPMENTS

WE OFFER

All Kinds
OF

Hardwood and Hemlock
Lumber

Hardwood

Flooring, Lath

AND

Dimension Stock

YELLOW POPLAR

MANUFACTURERS OF BAND SAWED

POPLAR
QUARTERED OAK
PLAIN OAK
CHESTNUT
BASSWOOD



SPECIALTY
QUARTER SAWED
WHITE OAK

Coal Grove, Ohio, U. S. A.

LUMBER CO.

Aardwood Record

Eighteenth Year,
Semi-Monthly.

CHICAGO, MARCH 25, 1913

{ Subscription \$2.
Single Copies, 10 Cents.



The "What & Why" of McIlvain Service

With yards in the heart of the best lumber districts, we are able to fill practically any lumber order. Having fifty or more shipping points, we are able to facilitate prompt delivery. The size of our organization enables us to quote rock-bottom market prices. Our business has been built on giving our customers such service as would be a continual source of satisfaction—we would continue building.

An important feature of McIlvain Service is the monthly stock list—A postal will bring "Lumber News" regularly

J. GIBSON McILVAIN & Co.
1420 Chestnut Street Philadelphia, Pa.

HOLLOWAY HARDWOODS

*The following Stock is band-sawn
and runs*

60% 14' and 16'

1 car 5/4" x 11" & wider 1s & 2s Plain
Red Oak

10 cars 4/4" x 6" to 12" 1s & 2s Cotton-
wood

5 cars 4/4" x 13" and wider 1s & 2s
Cottonwood

6 cars 4/4" No. 1 Common Cottonwood

Holloway Hardwood Lumber Co.
20 W. Jackson Blvd. Chicago



**Cartier-Holland
Lumber Company**



MR. MANUFACTURER:

We would like to contract our output of
Log Run BIRCH, SOFT ELM and SOFT
MAPLE for 1913, to be cut to order as near
as possible, in accordance with your wishes.

Our estimated cut of each wood would be
about as follows:

100,000' LOG RUN BIRCH

150,000' LOG RUN SOFT ELM

The above will be produced from choice logs



**Ludington
Michigan**



MICHIGAN

FAMOUS FOR HARD MAPLE AND GREY ELM

DIMENSION

MANUFACTURED BY

COBBS & MITCHELL, Inc.

CADILLAC, MICH.

We are manufacturing 1x1—22" to 40" Maple, Beech and Birch in our hardwood flooring factory.

This Stock is Kiln-dried

The Pieces are Straight

The Quality is Clear

Do You Want Such Stock?

Mitchell Brothers Co.

Sales Department

Cadillac, Mich.

March 8, 1913

Dry Michigan Hardwoods

1x4 Basswood No. 1 Common.....	11 M
6 4 Cadillac Gray Elm 1s & 2s.....	7 M
1x6 Maple 1s & 2s.....	22 M
1x9 Maple 1s & 2s.....	17 M
4/4 White Maple, End Dried.....	16 M
5/4 White Maple, End Dried.....	4 M
4/4 Birdseye Maple, End Dried.....	3 M
4/4 Soft Maple, No. 2 Common & Better.....	9 M

WE MANUFACTURE A SPECIAL GRADE OF HARDWOOD FLOORING FOR FACTORY FLOORS

W. D. YOUNG & CO.

MANUFACTURERS

FINEST MAPLE FLOORING

KILN DRIED, HOLLOW BACKED
MATCHED OR JOINTED
POLISHED AND BUNDLED

Hard Maple, Beech and Birch Lumber

1 TO 6 INCHES THICK

WRITE FOR PRICES

BAY CITY, :: :: MICHIGAN

THE

Kneeland-Bigelow Company

Hardwood Manufacturers

100,000 ft. 5/4 1st & 2nds Basswood
100,000 ft. 5/4 No. 1 Common Basswood
200,000 Feet
5/4 No. 2 Common and Better Beech

All of the above stock is nicely manufactured, being band sawed, trimmed, and well seasoned. We are prepared to quote attractive prices for this material for immediate shipment.

BAY CITY, MICH.



J. RAYNER VENEERED PANELS

ALL WOODS

SEND FOR STOCK LIST

MAHOGANY LUMBER

CARROLL AVE. AND SHELDON ST.
CHICAGO

Going up—Hardwood Timber

We have the following hardwood and pine timber for sale at prices that have not as yet been advanced with the rise in value on timber lands. For a short time we offer—

150,000,000 FEET HARDWOOD IN SOUTHEAST ARKANSAS — A SPLENDID OPPORTUNITY.

7,600,000 FEET OF HARDWOOD IN SOUTH-WEST ARKANSAS

We also have timber in British Columbia and on the Pacific Coast and Oregon.

For further particulars, address

John C. Spry

Room 1003 Harris Trust Bldg.,

Chicago, Illinois

Estabrook-Skeeel Lumber Co.

MANUFACTURERS AND DEALERS IN

Maple, Birch, Elm, Basswood, Ash
And Other Northern Hardwoods

In the Market for Round Lots of Hardwood

WRITE US BEFORE SELLING

Fisher Building, . . . CHICAGO

PHONE HARRISON 1984

A floor to adore



For thirty-three years Wilce's Hardwood Flooring has been among the foremost on the market and because it stands today "unequaled" is the best evidence that its manufacturer has kept abreast of modern methods and the advanced demands of the trade. To convince yourself of the above statements, try our polished surface flooring, tongued and grooved, hollow backed, with matched ends and holes for blind nailing—you'll find it reduces the expense of laying and polishing.

Our Booklet tells all about Hardwood Flooring and how to care for it—also prices—and is free.

The T. Wilce Company

22nd and Throop Sts. CHICAGO, ILL.

SAVE YOUR MONEY BY USING THE

RED BOOK

Published Semi-annually
in February and August

It contains a carefully prepared list of the buyers of lumber in car lots, both among the dealers and manufacturers.

The book indicates their financial standing and manner of meeting obligations. Covers the United States, Alberta, Manitoba and Saskatchewan. The trade recognizes this book as the authority on the lines it covers.

A well organized Collection Department is also operated and the same is open to you. Write for terms.

Lumbermen's Credit Assn.,

ESTABLISHED
1878

608 So. Dearborn St.
CHICAGO

Mention This Paper.

116 Nassau Street
NEW YORK CITY

"WE ARE GETTING RESULTS"

WRITES ONE ADVERTISER

This Means That He Is Getting

NEW BUSINESS

Through His Ad

If we can do it for him is there any logical reason why we can't for you?

MAKE US PROVE IT

HARDWOOD RECORD, CHICAGO

Welcome to Our City

When you are buying your ticket for a trip into the hardwood country, don't forget to tell the man to make Louisville, Ky., your destination. It's unnecessary to arrange merely for stop-over privileges, for the reason that when you get here we'll make things so interesting for you that it will be unnecessary to proceed further.

You know all about the traditional Kentucky welcome, of course, and it's taken for granted that you realize that this is still on tap, ready for wanderers like yourself who don't have a chance to enjoy life in God's country very often. But we've got more than a mere welcome; what is more to the point, we've got the goods.

In these piping times of good business, with everybody in the market for something or other, and a lot of items as hard to find as the storied needle in the hay-stack, the advantages of trading in a market like Louisville are even more apparent than at other times.

That is to say, you can get quartered oak, and plain oak, and poplar, and ash, and hickory, and mahogany, and veneers, and panels, and about everything there is to be had in the hardwood line, right here; it's a good deal like going into a department store and buying a refrigerator in the basement, a diamond ring on the first floor, a suit of clothes on the second and a dinner on the roof. Anything you may happen to want is here. If you don't see it, ask for it.

We'll be looking for you.

The Louisville Hardwood Club

EDWARD L. DAVIS LUMBER CO.
LOUISVILLE POINT LUMBER CO.
W. P. BROWN & SONS LUMBER CO.
NORMAN LUMBER CO.

OHIO RIVER SAWMILL CO.
BOOKER-CECIL CO.
THE LOUISVILLE VENEER MILLS
C. C. MENGEL & BRO. CO.

KNOXVILLE

Famous for Finest Type of Poplar, Oak and Chestnut

VESTAL LUMBER AND MANUFACTURING CO. KNOXVILLE, TENNESSEE.

QUARTERED WHITE OAK OUR SPECIALTY

MANUFACTURERS OF
QUARTERED WHITE OAK, PLAIN OAK, POPLAR, WALNUT & TENNESSEE RED CEDAR LUMBER
BAND MILLS AT VESTAL, A SUBURB OF KNOXVILLE. SOUTHERN AND LOUISVILLE & NASHVILLE RAILROAD

H. S. MIZNER,
Pres.

C. C. CANNON,
Vice-Pres.

J. M. LOGAN,
Gen'l Manager

C. R. SWANN,
Sec'y and Treas.

J. M. LOGAN LUMBER CO.

MANUFACTURERS AND WHOLESALERS
HARDWOODS AND PINE
POPLAR A SPECIALTY

Main Office and Yards: Knoxville

Branch Office and Yard:

Bank and McLean Ave., Cincinnati I. M. ASHER, Mgr.

We Want Orders for the following Dry Stock:
WHITE OAK—Plain or Quartered.

RED OAK—Plain or Quartered.

CHESTNUT

BASSWOOD

POPLAR

WHITE PINE

Always carry large well
assorted stock of all
kinds of Hardwoods.

CAN SHIP ON SHORT NOTICE.

Maphet & Shea Lumber Co.

Manufacturers and Wholesalers

OFFICE: 703-705 HENSON BUILDING

Yard: Middlebrook Pike and
Lonsdale Car Line

KNOXVILLE, TENN.

WE WANT TO MOVE

3 cars 4/4 No. 1 Common Poplar, 7" & up
2 cars 4/4 Clear Sap Poplar, 7" & up
1 car 4/4 Select Poplar, 7" & up
1 car 4/4 1 & 2 Red Oak, 10" & up
1 car 4/4 1 & 2 Chestnut
1 car 4/4 No. 1 Common Chestnut

We manufacture: YELLOW POPLAR,
OAK, CHESTNUT, WHITE AND YEL-
LOW PINE, HEMLOCK BARK, ETC.

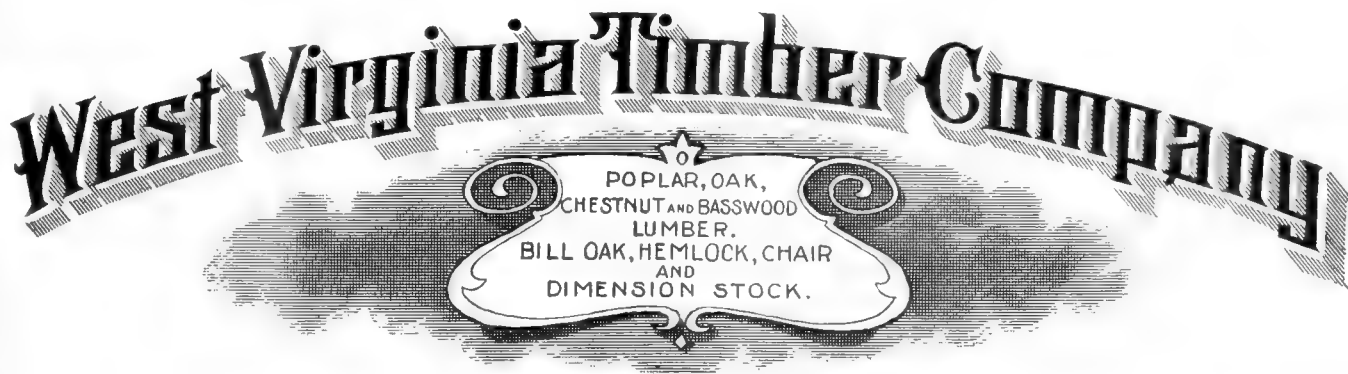
BAND AND CIRCULAR MILLS—EAST TENN.
MOUNTAIN VIRGIN HARDWOOD STUMPAGE

Kimball & Kopcke Knoxville, Tennessee

Manufacturers and Shippers of
Appalachian Hardwoods
OAK OUR SPECIALTY

"THE VERY BEST" Red Birch

Knoxville Veneer Co.
P. B. RAYMOND, General Manager, Knoxville, Tenn.



CHARLESTON, W. VA.

2 cars 6/4" Common & Better
Chestnut.

2 cars 4/4" 1sts & 2nds Cypress.

5 cars 4/4" 1sts & 2nds Red Gum.

5 cars 4/4" No. 1 Common Red Gum.

5 cars 4/4" 1sts & 2nds Sap Gum.



NASHVILLE



CELEBRATED FOR HIGHEST TYPE TIMBER GROWTH, FAULTLESS MANUFACTURE AND GOOD GRADES

Cherokee Lumber Co.

For the next thirty days we want to move Quartered White Oak and Chestnut and would appreciate your inquiries for attractive prices.

NASHVILLE, TENN.

SECURE BETTER PRICES

AT LESS SELLING COST BY REACHING MORE CUSTOMERS. HARDWOOD RECORD PUTS YOU BEFORE THEM ALL TWICE A MONTH.

ASK US ABOUT IT

We will name very attractive prices on a few cars of each of the following items:

4/4, 6/4, 10/4 and 12/4 1s and 2s Poplar.
4/4 and 8/4 Sap Poplar.
1 1/4", 1 1/2" and 2 1/2" No. 1 Common Poplar.
4/4 No. 1 and Panel Poplar in widths of 12 to 17", 18 to 23" and 24" and up.
4/4 x 13 to 17" Poplar Box Boards.
4/4 1s & 2s Basswood or Linn—very fine.
3/8, 4/4, 5/4, 10/4 and 12/4 1s & 2s Qtd. W. Oak.
4/4, 5/4, 6/4 and 8/4 No. 1 Common Qtd. W. Oak.
6/4 1s & 2s Qtd. R. Oak.
4/4, 5/4 and 6/4 No. 1 Common Qtd. R. Oak.
6/4 and 10/4 1s & 2s Hickory.
4/4, 6/4, 10/4 and 12/4 No. 1 Common Hickory.
4/4, 6/4, 8/4, 10/4 and 12/4 No. 2 Common Hickory.
4/4 1s & 2s Chestnut, also 5, 6 and 8/4.
4/4 No. 1 Common Chestnut.

John B. Ransom & Co.

MANUFACTURERS OF

Hardwood Lumber

Nashville, Tenn.

LAMB-FISH LUMBER CO.



Band Mill and General Offices

CHARLESTON, MISS.

THE LARGEST HARDWOOD MILL IN THE
WORLD—ANNUAL CAPACITY 40,000,000

We Produce

Kraetzer-cure
LUMBER

STOCK LIST—Dry Lumber on Hand March 1, 1913

	3'8	1/2	5'8	3'4	4'4	5'4	6'4	8'4	10'4	12'4	16'4
FAS. Qtrd. White Oak.....		50,000				25,000	7,000				
FAS. Qtrd. White Oak, 10" up.....					20,000						
No. 1 Com. Q. W. Oak.....				20,000	150,000						
No. 2 Com. Q. W. Oak.....					15,000						
FAS. Pl. White Oak.....	30,000	30,000	20,000		15,000	30,000					3,000
No. 1 Com. Pl. White Oak.....			40,000	20,000	400,000	5,000	20,000				
FAS. Pl. W. O., 12" up.....				4,000							
FAS. Pl. Red Oak.....			30,000					20,000			1,000
No. 1 Com. Pl. R. Oak.....			20,000	20,000							
C. & B. Qtrd Red Gum.....					50,000	5,000		1,000			
FAS. Circassian Red Gum.....	25,000	25,000	15,000	30,000	30,000	2,000	3,000	1,000			
FAS. Pl. Red Gum.....	400,000	200,000	125,000	300,000	500,000	75,000	80,000	40,000		3,000	
No. 1 Com. Pl. Red Gum.....	60,000	20,000	130,000	40,000	200,000	60,000	20,000				
FAS. Sap Gum, 18" up.....					15,000						
FAS. Sap Gum, 6" up.....	30,000	50,000	40,000	50,000		30,000	20,000	15,000			
No. 1 Com. Sap Gum.....					200,000		15,000				
No. 2 Com. Gum.....	75,000	30,000	20,000	35,000							
S. & B. Cypress.....					50,000	150,000	20,000				
C. & B. Tupelo.....						100,000					
Log Run Elm.....					45,000						

OUR LUMBER CONTAINS ALL WIDE STOCK PRODUCED IN MANUFACTURING AND WILL RUN OVER 50% OF 14 & 16 FT. LENGTHS. WE ALSO MANUFACTURE OAK TIMBERS & BRIDGE PLANK—FACILITIES FOR KILN-DRYING & DRESSING

**GOOD
GRADES**

“STEARNS”
QUALITY
LUDINGTON
HARDWOOD SPECIALISTS

**PROMPT
SERVICE**

When you look over our
HARD MAPLE you
know the reason why
they specify the

STEARNS BRAND

Why should you load
up with a large stock
when we carry the as-
sortment here and can
ship promptly when
you need it? Just try
out the

STEARNS SERVICE



Some of Our Maple Lumber

A Few Items to Spare:

- 5 cars 4/4 No. 1 Com. & Better Saps
- 3 cars 8/4 No. 1 Com. & Better Saps.
- 1 car 8/4 1s & 2s Step Plank.
- 3 cars 4/4 End Dried White.
- 2 cars 5/4 End Dried White.
- 1 car 4/4, 5/4, 6/4 and 8/4 Birdseye.
- 2 cars 12/4 1s & 2s.
- 1 car 10/4 1s & 2s.
- 1 car 6/4 1s & 2s.
- 1 car 5/4 1s & 2s.
- 2 cars 8/4 No. 1 Com, 6" & wider.
- 1 car 6/4 No. 1 Com, 6" & wider.
- 2 cars 5/4 No. 1 Com, 7" & wider.

The **STEARNS**
SALT & LUMBER CO. LUDINGTON, MICH.

BAND SAWN HARDWOODS

WE PRODUCE OUR OWN STOCKS

OAK—Plain and Quartered, Red and White

COTTONWOOD—Ash, Southern Elm, Gum, Soft Maple

A FEW ITEMS WE WANT TO MOVE:

100,000 Ft. 4/4" x 18" to 21" 1st & 2nds Cottonwood.
150,000 Ft. 4/4" x 9" to 12" Cottonwood Box Boards.
50,000 Ft. 5/4" x 13" to 17" 1st & 2nds Cottonwood.
75,000 Ft. 3/8" 1st & 2nds Red Gum.
41,000 Ft. 1/2" 1st & 2nds Red Gum.

44,000 Ft. 5/8" 1st & 2nds Red Gum.
86,000 Ft. 3/4" 1st & 2nds Red Gum.
110,000 Ft. 4/4" 1st & 2nds Red Gum.
120,000 Ft. 5/8" 1st & 2nds Sap Gum.
85,000 Ft. 3/4" 1st & 2nds Sap Gum.

WRITE US FOR PRICES

ANDERSON-TULLY COMPANY
HARDWOOD LUMBER **Memphis, Tenn.**

A Prominent Veneer Man says:

“I believe your new service showing the exact requirements of the Veneer and Panel Trade to be highly accurate, and a necessary part of the office equipment of any progressive veneer or panel factory.”

The same information would cost you thousands of dollars. The cost of our service is a small fraction of that.

Ask your competitor to tell you how it has helped him, and then write us for details.

HARDWOOD RECORD,

CHICAGO, ILL.

500 Copies Sold Within a Week After Prospectus Was Issued

Hardwood Record announces the issue on April 15,
1913, of an Authoritative Commercial and Scientific Book

American Forest Trees

By Henry H. Gibson, Editor Hardwood Record
Edited by Hu Maxwell, Wood Utilization Expert

The Work Involves:

First: A botanical description of the more than 300 species of American forest tree growth.

Second: A physical description of the wood of these species.

Third: A recital of the chief uses of all important American woods, together with suggestions of advantageously broadening their uses.

Fourth: Complete information concerning the range of growth of all varieties.

Fifth: Related trees are logically grouped according to families and spe-

cies; important species covered in substantial detail, and brief mention of the woods of minor importance.

Sixth: Scientific name of each tree is recited, as well as the various common names by which it is recognized in different parts of its range of growth.

Seventh: The properties of the various woods are carefully analyzed, particularly weight, hardness, stiffness, strength, elasticity, toughness, color, figure, and seasoning and lasting properties.

¶ The book will contain between 650 and 750 pages, will be printed on the best quality of enameled paper, and handsomely bound in half leather, dark green roan back and corners, with basket cloth sides, silk head-bands, gold stamping on the back, and gilt top.

¶ The work will be illustrated with more than 100 full-page pictures on plate paper in sepia, outlined in orange, from photographs, covering all the chief commercial varieties of virgin forest timber growing in the United States; and also with numerous engravings, from drawings and photographs, showing leaf and flower forms, etc.

¶ The price of the work is \$6.00, delivered by express or mail, and is sold only on subscription.

¶ An order blank, and a prospectus, showing the character of the paper, size of page and style of printing will be forwarded on application.

Address Book Department, HARDWOOD RECORD

537 South Dearborn Street

Chicago, Illinois

ORDERS SHOULD BE PLACED AT ONCE

CINCINNATI

THE GATEWAY OF THE SOUTH

THE MOWBRAY & ROBINSON CO.

CINCINNATI, OHIO

We Want to Move Quick

1" No. 1 Com. Poplar 1" Sap & Select Poplar
 1 1/4" No. 1 Com. Poplar 1 1/2" Sap & Select Poplar
 1 1/2" No. 1 Com. Poplar 2" Sap & Select Poplar
 2" No. 1 Common White Ash

WILL MAKE LOW PRICES TO MOVE QUICK

WE WANT TO BUY

1", 1 1/4", 1 1/2" 1s & 2s AND NO. 1 COMMON SAP GUM
 1", 1 1/2" & 2" 1s & 2s AND NO. 1 COMMON RED GUM
 1" NO. 1 COMMON TUPELO.

SUBMIT US YOUR STOCK SHEETS
 WITH BEST CASH PRICES

DUHLMEIER BROS.
 CINCINNATI, OHIO

The Maley, Thompson
 & Moffett Co.

**Veneers, Mahogany and
 Hardwood Lumber**

Largest Stocks Best Selections
 CINCINNATI, OHIO

89%

of HARDWOOD RECORD subscribers are owners of steam plants. Eighty-nine per cent are, therefore, buyers of wood-working machinery. There is little percentage of waste circulation in HARDWOOD RECORD for machinery advertisers.

W. E. HEYSER, President WEAVER HASS, V. President
 BENJAMIN BRAMLAGE, Sec'y & Treas.

The W. E. Heyser Lumber Company

MAIN OFFICE & YARDS
 Winton Place
 Cincinnati, Ohio

BRANCH YARDS AND MILLS
 West Virginia, Mississippi, Arkansas & Kentucky

12,000,000 ft. High Shipments made
 Grade West Vir direct from our
 ginia and Southern own yards and
 Hardwoods in mills in straight or
 stock at all times. mixed cars.

SEND US YOUR INQUIRIES

L. W. RADINA & CO.

DEALERS IN

**POPLAR AND
 HARDWOODS**

CINCINNATI : : OHIO

BENNETT & WITTE

10 cars 4/4 No. 1 Common Plain Red Oak
 5 cars 4/4 No. 1 Common Plain White Oak
 5 cars 5/8 1sts and 2ds Sap Gum.
 10 cars 3/4 1sts and 2ds Sap Gum
 20 cars 4/4 1sts and 2ds Red Gum.
 10 cars 4/4 No. 1 Common Red Gum.
 1 car 3" Plain White Oak, 1sts and 2ds.

Main Office
 CINCINNATI, OHIO

SOUTHERN OFFICE, MEMPHIS, TENN.
 EXPORT OFFICE, NEW ORLEANS, LA.

THE EAST

BOSTON

NEW YORK

PHILADELPHIA

WM. WHITMER & SONS

INCORPORATED

Manufacturers and Wholesale-
sellers of All Kinds of"If Anybody Can,
We Can"

HARDWOODS

West Virginia Spruce and Hemlock
Long and Short Leaf Pine Virginia Framing

Franklin Bank Bldg.

PHILADELPHIA

Willson Bros. Lumber Co.

MANUFACTURERS

WEST VIRGINIA HARDWOODS

Oliver Building

PITTSBURGH, PA.

JONES HARDWOOD COMPANY

33 Broad Street, Boston, Mass.

Birch, Maple and Beech

"WHITE PINERS"

AMERICAN LUMBER & MANUFACTURING COMPANY

"Old-fashioned" Soft Cork White Pine

"Idaho" White Pine

"Silver" White Pine

Also Yellow Pine and Hardwoods

Manufacturers and Jobbers.

PITTSBURGH, PA.

Saw Mills Designed and Built

Plans and specifications prepared. Construction supervised.
First class heavy millwright work. Entire plants surveyed. Ma-
chinery for complete mills. Fire loss adjustments. Practical
sawmill engineer. Can save you money. Highest testimonials.

C. M. STEINMETZ,

P. O. Box 83, Washington, D. C.

H. D. WIGGIN 89 STATE STREET BOSTON, MASS.

MANUFACTURER HARDWOOD LUMBER

Circular-sawed Poplar, Oak, Chestnut, Basswood, Maple

Mill at Stone Coal Junction, West Virginia

CHARLES HOLYOKE

141 MILK STREET, BOSTON, MASS.

HARDWOODS

WHITE OAK } 6x6 to 12x12 BILL TIMBERS } 10 to 20 ft.

ALSO BRIDGE PLANK

J. S. KENT COMPANY PHILADELPHIA

W. R. TAYLOR LUMBER CO.

Wholesalers and Manufacturers
CYPRESS, WHITE PINE, HARDWOODS AND HEMLOCK

1829 Land Title Building, PHILADELPHIA, PA.

PALMER & PARKER CO.

TEAK

ENGLISH OAK

CIRCASSIAN WALNUT

MAHOGANY

VENEERS

EBONY

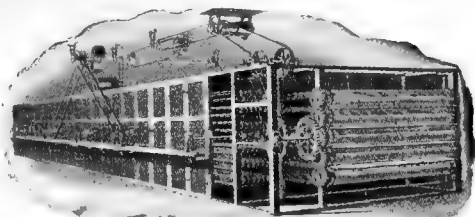
DOMESTIC

HARDWOODS

103 Medford Street, Charlestown Dist.

BOSTON, MASS.

PROCTOR VENEER DRYER FIREPROOF —AN— UNPARALLELED SUCCESS

No
Splitting
Nor
Checking
No
Clogging
Nor
AdjustingRecom-
mended by
all those
who
have tried
itTHE PHILADELPHIA TEXTILE MACHINERY COMPANY
DEPT. L HANCOCK & SOMERSET STS. PHILA. PA.

If You Knew

What our BULLETIN SERVICE was doing
for your competitor in the lumber business, you'd
not only want the service yourself, but YOU'D
HAVE IT.

Let Us Tell You About It.

Hardwood Record :: Chicago

THE EAST

LEADING MANUFACTURERS AND JOBBERS

W. P. Craig Lumber Co.

Wholesale Hardwood and Building

Lumber

Empire Building, :: PITTSBURG, PA.

HARD MAPLE

When the quality of being hard is required in Maple, Vermont or Adirondack stock should be specified. Maple will not grow harder for us than other people, but it certainly does grow harder in this section of the country than elsewhere.

WE CAN MAKE PROMPT SHIPMENTS.

GEO. WEBSTER LUMBER CO.
21 Besse Place, Springfield, Mass.

WISTAR, UNDERHILL & NIXON

REAL ESTATE TRUST BUILDING, PHILADELPHIA, PA.

QUARTERED WHITE OAK

NICE FLAKY STUFF

WM. E. LITCHFIELD

MASON BUILDING, BOSTON, MASS.

Specialist in Hardwoods

Manufacturers are requested to supply lists of stock for sale

We Know How to fill your orders for all kinds of **HARD-WOODS, WHITE PINE, YELLOW PINE, SPRUCE, HEMLOCK, CYPRESS, HARDWOOD FLOORING.**
Give us a trial.

THOMAS E. COALE LUMBER COMPANY
FRANKLIN BANK BUILDING, PHILADELPHIA, PA.

J. & J. VINKE

Agents for the Sale of

AMERICAN HARDWOODS IN LUMBER AND LOGS
AMSTERDAM, HOLLAND

For 2 Cars 4/4 No. 1 Common and Better Chestnut
Quick 1 Car 6/4 No. 1 Common and Better Chestnut
1 Car 8/4 No. 1 Common and Better Chestnut
Shipment 3 Cars 5/4 Sound Wormy Chestnut
Inquiries Promptly Answered
DANIEL B. CURLL, REAL ESTATE TRUST BLDG., PHILADELPHIA, PENNA.

BEECHER & BARR

OAK CHESTNUT POPLAR

WHITE PINE, YELLOW PINE AND HEMLOCK
INTERIOR TRIM. HARDWOOD FLOORING.

442 LAND TITLE BLDG. PHILADELPHIA, PA.

LET us talk to you about the plain and quartered oak that made Indiana famous. It's the kind we make to-day.

Wood-Mosaic Co., New Albany, Ind.

R.E. Wood Lumber Company

¶ Manufacturers of Yellow Poplar, Oak, Chestnut, Hemlock and White Pine.

¶ We own our own stumpage and operate our own mills.

¶ Correspondence solicited and inquiries promptly answered.

GENERAL OFFICES:
CONTINENTAL BUILDING.

Baltimore, Maryland

POPLAR

4/4 to 12/4, All Grades

We also manufacture Oak and Gum

If you appreciate quality and service,
we will hold your business

Faust Bros. Lumber Co.

SALES OFFICE:
CHICAGO, ILL.

MAIN OFFICE:
PADUCAH, KY.

CYPRESS LUMBER

1s and 2s: 5/4"....	21845	Selects: 8/4".....	2620
6/4"....	8000	Shop: 5/4".....	715
8/4"....	3220	6/4".....	13925
Tank: 8/4".....	8360	8/4".....	4340
Selects: 5/4".....	39320	Common: 5/4".....	142370
6/4".....	11500	6/4".....	50925

RUSSE & BURGESS, Inc.

Memphis, Tennessee

E. F. PERRY
Manager

LOUIS H. PARKER
Asst. Manager

ESTABLISHED 1892

Lumber Underwriters

Every Kind and Form of

FIRE INSURANCE

FOR LUMBERMEN

66 Broadway

New York



Table of Contents



COVER PICTURE:—Lake Carrier, Mississippi.

REVIEW AND OUTLOOK:

General Market Conditions.....	15
National Drainage Congress	16
Menace in High Prices	16
Lake Carrier	16
Liverpool Mahogany Sales	16
Evolution in Hardwood Demand	16
Sabotage Illustrated	17
An Experiment in Conservation	17
A New Paper Material	17
Venerable English Woodwork	18
An Awakening	18

CARTOON:—The Hardwood Situation

AMERICAN FOREST TREES:—Western Larch

SPECIAL ARTICLES:

Confusion of Common Names Sometimes Serious	21
An Analysis of Durability	22-23
Sources of Hardwood Waste	24-26
Eliminating One Loss at the Sawmill	26-27
A Remedy for Chestnut Blight	27
Woods of the Pea Family	28-29
Tanner's Demands on the Forest	30
Northern Poplar for Paper Pulp	31
Wood the Underwriter's Scapegoat	32
Hardwoods Used in Logging Conifers	33
Facts About Some Precious Woods	34
Annual Chicago Lumbermen's Club	35-36
Traffic Matters Around Memphis	36
Advantage of Personal Contact	37
Wood-Using Industries of Maine	38

THE MAIL BAG

NEWS MISCELLANY

HARDWOOD NEWS NOTES

HARDWOOD MARKET

SUBSCRIPTION TERMS: In the United States and its possessions, and Canada, \$2.00 the year; in foreign countries, \$1.00 extra postage.

In conformity with the rules of the postoffice department, subscriptions are payable in advance, and in default of written orders to the contrary, are continued at our option.

Instructions for renewal, discontinuance, or change of address, should be sent one week before the date they are to go into effect. Both old and new addresses must be given.

Both display and classified advertising rates furnished upon application. Advertising copy must be received five days in advance of publication dates.

Entered as second-class matter May 26, 1902, at the postoffice at Chicago, Ill., under act of March 3, 1879.

OAK FLOORING

Kiln-
Dried

Polished



Hollow
Backed

and
Bundled

ICHABOD T. WILLIAMS & SONS

Foreign and Domestic Woods
In Logs, Lumber and Veneers

11th Ave. and 25th Street
NEW YORK

910 So. Michigan Avenue
CHICAGO



Hardwood Record



Published in the Interest of the American Hardwood Forests, the Products thereof, and Logging, Saw Mill and Wood-Working Machinery, on the 10th and 25th of each Month, by

THE HARDWOOD COMPANY

Henry H. Gibson, Editor and Manager
Edwin W. Meeker } Associate Editors
Hu Maxwell }

Entire Seventh Floor Ellsworth Building
537 So. Dearborn Street, CHICAGO
Telephones: Harrison 8086-8087-8088

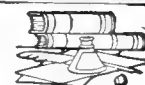
Vol. XXXV

CHICAGO, MARCH 25, 1913

No. 11



Review and Outlook



General Market Conditions

THOSE HANDLING NORTHERN WOODS anticipate the imminent drying of a considerable quantity of northern stock simultaneously, and believe that such a condition will be a blessing to the hardwood handling and consuming trade rather than, as would be the case under ordinary conditions, having a detrimental influence upon the hardwood trade. In other words, there has been such a decidedly short quantity of stock that any sudden placing of a large amount of dry hardwoods on the market would not break the market, but would simply go to fill up requirements which actually have been short for several months. Of course, there has been the usual active selling, but a mere sale will not put dry stock on sticks either in a distributing yard or at the wholesale consuming factory.

The wholesale element can probably appreciate this condition more acutely than can any other branch of the hardwood trade. A great many wholesale concerns whose selling organizations are perfect have merely been able to supply the actual immediate demands of their trade, and hence the acquisition of a large quantity of dry northern stock will certainly be considered by them most favorably.

Very little change has been noted recently in the southern producing field in the matter of logging, save that in some sections the planting season has already resulted in the withdrawal of innumerable teams from woods operations for work in the fields. Of course the effect of such a shortage of horses and labor in logging operations will not be particularly excessive, because the small farmer operating in the woods hauls in only a relatively small amount of logs annually under any conditions. Still, with the demand for logs as it is now being maintained, even this influence on the supply will be felt in every section where such conditions exist. It will mean that the supply of logs secured through other methods will be strained to a greater degree.

The small mills throughout the southern hardwood fields have actually produced considerable stock during the last few months, but there has been a veritable swarm of buyers from every class of wholesale and consuming houses, with the result that where these small accumulations of hardwood lumber have not been snatched up immediately, the owners have been wise enough to play one buyer against the other, and have in some cases realized outlandish prices for stock of mediocre manufacture.

It is undoubtedly a fact that various conditions have somewhat checked immediate building activity with the coming of the early spring months. Three causes can be seen as possible explanations of such deferred activity. In the first place high prices on all classes of raw material entering into house construction are actually being considered seriously by home builders before they invest their savings

in house construction. Lumber is not the only commodity for building purposes which has increased in value, and the aggregate increase of all raw material makes a considerably greater expense to the home builder than he would have incurred a few years ago in erecting the same type of house.

A second point to be considered is the tightness which has prevailed in the money market for some little time, which would necessarily have the effect of reducing activity in speculative building. Such a condition has actually been observed and it is reasonable to suppose that the money tightness has had some influence.

Further, the uncertain seasonal conditions probably delayed contractors in getting started at their work. The holding off of rigid winter weather in most of the northern states led a good many people to believe that winter was merely being deferred, and they were not willing to take a chance of starting on building operations and being held up later. This prediction has been carried out and it is quite likely that after the last violent effort of winter things will open up much more actively. In fact a great many houses built on a speculative basis have not found a ready market because of the open winter, and it is anticipated that with pleasant spring weather coming in these will find a ready sale, and speculative builders will enter into new contracts for further structures.

The factory trade is for the most part not placing large orders ahead, but is purchasing a considerable quantity of lumber for immediate use. This would indicate that buyers are still anticipating a break in prices, and the question has resolved itself into one of judgment as between the sawmill man and the wholesale buyer. The sawmill man reiterates constantly that he sees no chance for a break in hardwood prices for several months, while, as suggested, the buyer through his buying policy and sometimes through his expressed opinions shows that he thinks such a break is imminent. Regarding this question there is still every reason to believe that the sawmill man is correct in his opinion.

Plain oak continues to be the king of them all at present. Probably the demand for this wood has been somewhat accentuated in addition to the regular lines of consumption, by its increase in favor in high-grade furniture manufacture. Recent offerings on the part of furniture makers have shown a considerable quantity of high-grade plain oak furniture, which seems to be taking very readily.

Quartered oak continues to forge steadily to the front. Some items of quartered oak are actually short, and all of the better grades are commanding constantly stronger prices, and are showing a steadily improving demand.

Low-grade hardwoods in some items are practically not in the market. A large manufacturer in one of the biggest of the southern

hardwood centers, which taps the poplar region, recently stated that that city contained only about ten cars of available one inch cull poplar. This same city contains an extensive box factory, and at the time this statement was made this factory had only enough poplar lumber to carry it a week, and no definite prospect of getting any considerable further quantity.

Gum, particularly red, is still somewhat off-color, although there is no break in price. Still there is quite a little of this stock to be had.

All told the situation continues to look very favorable, and while as noted before, there is some tendency to consider the argument of the buyer in the matter of prospective break in price, still this sentiment is only occasionally apparent and should have no weight in affecting the actual market.

National Drainage Congress

THE THIRD NATIONAL DRAINAGE CONGRESS will be held in St. Louis April 10, 11 and 12, at the Planters' hotel. Arrangements have been made for several thousand delegates, and the program includes a number of very important matters. The development of the vast areas of swamp and overflow land in this country constitutes a problem for the present and the future to solve. The sessions of the congress in St. Louis are open to the public.

Menace in High Prices

A LEADING MANUFACTURER of oak lumber and oak flooring in a letter quoted in the "Mail Bag" section of this issue of **HARDWOOD RECORD**, utters a protest against the current trend of boosting oak lumber prices to an unreasonable degree. If this protest came from an exclusive consumer of hardwoods, it would not be deemed remarkable, but originating as it does from a man whose interest lies more in the production than the consumption of this wood, the protest should receive consideration.

This is not the only instance where leading producers of oak lumber are protesting against what they regard as taking an undue advantage of consumers incident to the shortage of stock, to demand prices for their product which are out of proportion to values commanded by other leading hardwoods. They believe that excessive prices will induce increased substitution, not only in other woods but in materials other than wood, which will have a permanent effect in checking future demand for oak, notably in the interior finish and furniture trades.

The writer of the letter referred to calls attention to what happened to wide poplar five years ago when it took on a boom by reaching a price of fifteen cents a foot before the advance ceased. Wide poplar can be bought today for a little more than one-half this price, and it is a dull seller at that. The street car panel trade, automobile body business and the panels for delivery wagon sides have largely gone to steel, and it is doubtful if the trade is ever to be reclaimed for lumber.

Oak ties have gone so high that the railroads have found that they can successfully treat ordinary types of hardwoods and make ties at less money, and of equally or better lasting qualities, and hence there is a tremendous increase in the production of ties from beech and kindred woods which formerly were not even considered as a substitute for oak.

As the writer observes, "good common sense and conservative action should be employed to check radicals, who at this time are seeking to boost prices on some woods beyond the point of safety."

Lake Carrier

THE PICTURE ON THE FRONT COVER of this issue of **HARDWOOD RECORD** represents a scene where lake and forest meet in the hardwood region of northern Mississippi. The sheet of water is Lake Carrier, near the headquarters logging camp of the Carrier Lumber & Manufacturing Company, about twenty miles from Sardis. It was formerly a deep bayou, and was, of course, an old river channel not wholly silted up since the current ceased to flow through it. It was once known as Bobo lake, and the customary traditions and superstitions were associated with it,

particularly as it was known to the colored population who can see and hear things after dark.

That is a typical hardwood region. Some of the best white oak of the South comes from here, and there are many other kinds of timber, such as red oak, red gum and tupelo. Undisturbed nature has done her best work here, and forests have covered the region since time immemorial. The storehouse is now being drawn upon to meet the demands of commerce.

Lake Carrier and the surrounding region have been long familiar to hunters, fishermen, and campers. The woods were formerly full of deer, and there are some yet; the water courses and the half-hidden lakes and bayous abound in ducks and other waterfowl; the tree tops are alive with creatures that fly or climb; and the waters teem with fish. No sportsman or lover of nature could ask for more.

It is inevitable, and to some extent regrettable, that the saw-mill, tramway, and tote road must invade scenes like this and disturb the beauty and break up some of nature's associations; but trade and commerce demand it, and it must be done. The country's call for lumber penetrates the fastnesses of mountains and the quietude of lowland forests, and the response comes back from scenes like Lake Carrier.

Liverpool Mahogany Sales

LAST MONTH'S AUCTIONS OF MAHOGANY at Liverpool resulted in practically a cleanup of every desirable piece of wood in that market. The demand was active and prices ranged high. There is no evidence that the stock will be replenished to any considerable extent for some time to come. At the present time there is a strong demand for medium to large sized African logs, and highly figured logs of good dimensions are much sought and realize high prices.

Good Cuban wood is in active demand, but the run of this stock at present is largely not of either the size or character that made the extraordinary reputation for this splendid material. Large fancy Cuban logs command the highest price in the history of the trade, and other descriptions are selling at fair values.

There is very little mahogany being received at this time from Colombia, Guatemala, Honduras, Mexico or Nicaragua. It now looks as though mahogany values in logs, lumber and veneers would range very much higher for some time to come. This certainly will be true if supply and demand cut any figure in the situation.

Evolution in Hardwood Demand

FOR MORE THAN SEVEN YEARS **HARDWOOD RECORD** has been engaged in collecting, collating and putting in both bulletin and card index form a record of the annual requirements of the majority of wholesale hardwood consumers throughout the United States and Canada. These record paragraphs show the state, town and name of the concern, line of goods produced, name of the buyer, and recite by quantity, kind, grade and thickness items of annual consumption. Constant work on this record constitutes an important study in hardwood evolution and economies.

In the latter part of February a correction bulletin involving more than fifty pages was printed as a supplement to this service. In this bulletin were carefully revised the requirements of more than twenty-five hundred consumers, and remarkable as it may seem there were corrections required on more than twenty-five per cent of these paragraphs, owing to a change made by the purchasers of hardwood materials in their lumber requirements.

A study of the record indicates that every buyer is attempting to reduce his cost for lumber materials by substituting lower grades or lesser priced woods than formerly. Beyond question wholesale consumers are fast learning that it is possible to utilize lower grades of standard woods to advantage, and also in many cases to advantageously employ cheaper woods for the higher priced ones formerly purchased.

While these wonderful changes in requirements are rather upsetting to general conditions, they all trend to higher efficiency and

make for closer utilization of the present hardwood product of the country.

The total cost of this service to HARDWOOD RECORD in the past years has been approximately \$50,000, but it is a service that is so invaluable to lumber manufacturers, merchants and consumers alike that this publication feels amply repaid in its painstaking effort in making this expenditure on behalf of its advertising clients, and will continue to keep the service corrected up-to-date at all times.

In this connection it may be noted that HARDWOOD RECORD considers itself highly complimented that the National Hardwood Lumber Association is making an attempt to duplicate this copy-righted service in pamphlet form for the benefit of its members. The association has already published its first bulletin.

It may also be noted in this connection that HARDWOOD RECORD also issues a corresponding set of bulletins covering annual requirements in veneers and panels for the benefit of that element of the lumber industry. This register to date shows the requirements of about 750 buyers.

To those who are responsible for the marketing of lumber and veneers, this service is invaluable, because from the card index system in which both are arranged, it is possible to instantly refer to the buyers of any kind of hardwood lumber, dimension stock, veneers or panels that are being consumed by the leading concerns of the country, and hence it is very easy to reach the trade directly interested in any particular item of stock that the manufacturer or merchant has to market.

Sabotage Illustrated

THE INDUSTRIAL WORKER, published at Spokane, Wash., and an organ of the Industrial Workers of the World, and further an organ particularly interested in the lumber industry, contained in a recent issue an article, entitled "Don't Do It Boys." The article is a sarcastically and rather cleverly worded "warning" to members of the Industrial Workers of the World not to indulge in what is termed "sabotage" in effecting what this organization considers justifiable action in the interests of the woods worker.

While the article is so cleverly worded that it could not technically be condemned as malicious literature, still the meaning is too easily discernible to admit of any possible misinterpretation of its purpose.

The malicious intent of the members of this infamous order, as exemplified in the particular article referred to, can best be appreciated by reading what the writer of that article considers a definition of "sabotage." As noted, it was published under the title "Don't Do It Boys," and runs as follows:

We are sure that no self-respecting lumber worker would ever resort to that terrible thing called sabotage. We wish to warn all workers against it.

You don't know what sabotage is, you say? Well, perhaps it is best to tell you so that you may take warning.

Sabotage in the woods might mean working slow on the job. You wouldn't do that, would you? Never. It is against the interest of Weyerhaeuser, Clark, Kirby and Long. You love these gentlemen, don't you?

Sabotage may mean displacing the tools where they are not easily found. Promise us that you will never do that. The day workers especially should never resort to such an infamous thing.

Sabotage may mean that logs are cut shorter than the required size. When the boss shortens your pay you should never shorten the lumber, for his daughter may desire to purchase a diseased count from across the ocean, and you know your interests are identical. What a pleasure it is to be allowed to support a count!

Sabotage may mean the driving of spikes into the logs or even into the trees. Some uncivilized loggers have threatened to drive a 20-penny spike a day for every nickel that is cut from their wages. Terrible! No

good, honest, Christian, gentlemanly logger would do anything like that. It isn't good for mill saws.

Don't use sabotage, and for your kind forbearance we feel sure that you will receive a suitable reward. The boss may be generous enough to cut your wages so as to save you the trouble of spending so much, and lengthen your hours so that the devil may find no mischief for idle hands to do.

For the love of your boss and the glory of your soul, don't use sabotage.

There surely must be some means of preventing the issuance through the mails of such literature, which is essentially and undeniably against the interests of society. While it is designed to be read only by a very limited percentage of a class of labor, which while considerable numerically, is relatively not unusually significant in its importance, nevertheless such writings illustrate one of the many insidious methods employed by the Industrial Workers of the World to stir up a feeling of class hatred, which is entirely unjustifiable and unjustified. While the bulk of the laboring body is undoubtedly made up of fair-minded and thinking citizens who will not be influenced by such rank publication, still there is a considerable element, as there is in every body of men, who are naturally attracted by the spectacular and the fire-brand arguments of men whose personalities and wills are strong enough to dominate their mind.

This element is sufficiently important to cause an inestimable amount of trouble in sawmill operations, and if the growth of such an element can be checked by a censure of its printed organ this censure should be effected.

UNSOLICITED TESTIMONIAL

Likes the Record

Westminster, Md., March 17, 1913.

Editor HARDWOOD RECORD, Chicago, Ill.

Dear Sir: I enjoy your paper very much. It should be read by every lumberman.

With kindest regards,

Yours truly,

H. L. FRIZZELL.

An Experiment in Conservation

THE SINGER MANUFACTURING COMPANY is one of the largest hardwood lumber consuming institutions in the country, and in addition to its various manufacturing plants located in this and foreign countries, is a large manufacturer of lumber and veneers. This company has important timber holdings and several sawmill plants in Arkansas, and is now making

plans for an experiment in better utilization of its forest by reducing its small-sized timber, of which it has a large quantity, to core-making material.

The plans for this equipment involve logging the small timber, running from nine to fourteen inches in diameter, in full log lengths and transporting it in this form to a new plant near one of its sawmills at Trumann, Ark. At this plant the "poles" will be cross-cut to six feet lengths, which is a length rendering itself the most adaptable for the company's purposes. The bolts will be sawed into seven-eighth-inch lumber, cut "live" and unedged, and the resultant product piled onto dry-kiln trucks and steamed under pressure through a Kraetzer Preparator, kiln-dried, and then forwarded to a cutting room where the stock will be reduced to material for core stock, and built up into cores for sewing machine tables three-quarters of an inch in thickness. Then it will be shipped to the various plants in which the stock is veneered. The company proposes to use for this core stock oak, gum and other woods indiscriminately, and will start off its plant with a daily output of 35,000 feet.

This plan certainly means an increase of lumber output from small timber, the tops of large timber, etc., of well towards 3,000 feet to the acre, and is an example that can safely be duplicated by many other important hardwood lumber manufacturing houses.

A New Paper Material

FEW PEOPLE have thought of looking to the almost treeless regions of the Sudan for relief from the threatened scarcity of

pulpwood when the aspen and spruce forests of the United States and Canada have reached their limit of supply. The material which seems to promise great things is a kind of water-weed called sudd which grows in the upper Nile, south of Egypt. Estimates which place the quantity at enough to supply the world with paper are doubtless overdrawn, as such estimates usually are, but it has long been known that sudd exists in vast quantities in the stagnant reaches of the upper Nile. For long distances it is a bar to navigation. It dams the river, causing large tracts of level land to overflow, and the submerged land produces as much sudd as the river itself. The weed takes root in the bottom of the river, but grows to the surface, where it accumulates in thick masses through which the most powerful steam tug cannot force its way. It is said (possibly it is only a traveler's tale) that the hippopotamus sometimes crosses the Nile without touching water, by walking on the thick mat of sudd.

A recent consular report gives an account of experiments having for their purpose the conversion of sudd into pulp suitable for paper. The fiber is good but the color is bad, and the difficult problem has been to bleach the sudd without destroying the fiber. It is claimed that a way has been found to do it.

The experiment took place in a demonstration laboratory at Brondesbury, England. At 12:30 p. m. the sudd was placed in a tank containing 150 gallons of bleachoid, which is obtained by an electrolytical process from a solution of common salt. Five hours later it was of a very light cream color, and, more important still, the fiber had in no way been attacked. By 8:30 the sudd had reached a creamy white shade, and in another three hours it had become a fair white. Samples were then taken, and the remainder was left in the tank overnight, and by morning it had reached a white that could be used for high-class paper making.

Whatever further results are obtained from the experimental demonstration one fact stands out prominently, namely, that sudd has been successfully bleached, and that the fiber is exceptionally strong. The next step will be to prove that, exploited on a commercial scale in the Sudan, sudd will be a paying proposition. About this there seems to be little doubt in the minds of experts. The cost of the raw material is reduced to the cost of labor; sudd fuel for the dynamo is obtainable on the spot, and salt from the Red sea.

An Awakening

PERHAPS NEVER BEFORE IN THE HISTORY of an important commercial pursuit has there been such an awakening to the frailties and inefficiency of a business as is manifested at the present time in the conduct of hardwood manufacture, grading and sale of the lumber product. President W. E. Delaney of the Hardwood Manufacturers' Association of the United States, in his address at the recent annual meeting of that organization, made the following frank statement: "I am not blind to the fact that perhaps no other industry with the importance of lumber in the commercial world is today handled with as great waste and as little intelligence as our product."

It is held by good authorities that less than fifty per cent of the forest wealth of the land is now utilized. An unholy waste and unmistakable inefficiency marks every detail of lumber production from the forest to eventual utilization. It is further held that if the steel and iron business were conducted on corresponding lines the entire industry would be in bankruptcy. Astute and thoughtful people realize that there is an altogether senseless amount of waste in lumber manufacture; that the grading systems employed are highly unscientific and crude; and that the method of sale and distribution are far from what they should be.

High costs all along the line are appalling. The high cost of logging is duplicated in the high cost of manufacture. The high cost of manufacture is duplicated in the high cost of assorting, yarding, seasoning and loading. High mill cost is again duplicated in the high cost of selling. Were it not that the timber holdings of the average lumber manufacturing concern were so nearly a free gift to the owners as to be pretty nearly regarded so, the entire industry would be in financial difficulties.

These presentations may be regarded as radical, but they are facts just the same, and the sooner manufacturers, merchants and users of lumber get down to a close study of higher efficiency, the longer the industry will be perpetuated and the more money there will be in it for those participating.

Enterprising men in this trade have already spent much thought and much money in an attempt to secure higher efficiency. Some of these attempts have been crowned with success, while other alleged economies have proven to be manifest extravagances.

A writer on scientific business efficiency says: "The bane of many a good idea has been the intemperate zeal of its exploiters. The philosopher's passion for unity and his desire to trace all things back to the one sufficient cause seem in some degree to permeate all minds. No sooner does a man conceive a truth in his line of thought than he begins to develop it and elaborate it, until it becomes so great in his mental vision that it shuts out the whole horizon; and he is ultimately self-persuaded that if only this were adopted man's ills would cease. The name of cure-alls is legion.

"The regrettable thing about it all is that the over-zealous efforts of the would-be benefactor arouse the innate stubbornness of the prospective beneficiary, and so deprive the world of a good."

Both the pioneer and the reformer have their troubles. Pioneering in every line is expensive, and the average reformer is a nuisance, but today the manufacturer, the merchant or the eventual consumer of forest products who has not had his thoughts turned to scientific efficiency is classed as an old fogey.

Public opinion now makes it incumbent upon the real business man to investigate every new method that looks to higher efficiency, and the lowering of costs. There is more room for the study of scientific efficiency in nearly every detail of lumber production, manipulation and marketing than in most any other important commercial pursuit in this country, and it is a good sign when the astute, thoughtful men in this trade are taking up these questions one by one and attempting to solve them in the best way.

When these problems are solved it will be found beyond question that it is possible to develop two dollars from the forest where one dollar is developed today.

Venerable English Woodwork

THE OLD ENGLISH CARPENTERS used good woods and they did their work well. When they built a house they constructed it to last. This is called to mind now and then when historic buildings in England are examined. One of the latest to be brought to public notice is an old house which has stood more than 700 years near Hereford, England, and known in English local history as Rotherwas Mansion. The paneling and other interior woodwork consist of oak, sycamore, acacia and yew. There were twelve rooms finished in that way, and a comparatively large amount of wood was required, since veneers and thin boards were not fashionable when that house was built. Everything was solid and massive. One of the rooms was once a bed chamber in which James I slept in 1618.

Collectors of antiques in England are expressing concern just now because of the announcement that the woodwork is to be stripped from the interior of the mansion and offered for sale at auction. It is believed that some of it, perhaps all of it, will be bought by wealthy Americans, and that English museums will miss a valuable collection of panels, posts, capitals, and other ornaments and carvings which bear the stamp of antiquity. The objects will be welcomed in this country, particularly if the purchasers should decide to place them in museums here where modern dealers and workers in wood will have an opportunity to study the venerable workmanship of old craftsmen.

Because the price of native hardwoods has advanced considerably the past year some of the northern furniture manufacturers are talking about importing more of their cabinet woods from the Philippines. It is easier to talk about that than it is to do it, and get satisfaction out of the doing.



Pert, Pertinent and Impertinent



Joaquin Miller's Great Poem

Could I but return to my woods once more,
And dwell in their depths as I have dwelt,
Kneel in their mosses as I have knelt,
Sit where the cool white rivers run,
Away from the world and half hid from the sun,
Hear wind in the woods of my storm-torn shore,
Glad to the heart with listening
It seems to me that I then could sing,
And sing as I never have sung before.

I miss, how wholly I miss, my wood,
My matchless, magnificent, dark leaved arsh,
That climb up the terrible heights of Hood,

Where only the breath of wind comes stirring,
These Alps they are but in a wrapped in storms,
Formless masses of Titan forms,
They loom like ruins of a grand old age,
And lonesome as death to look upon.

O God! once more in my life to hear
The voice of a wood that is dead and alive,
That stirs with its being like a vast beehive!
And oh, once more in my life to see
The great bright eyes of the antlered deer!
To sing with the birds that sing for me,
To tread where only the red men trod
To say no word, but listen to God!

A Character

The heart of life is hid from him;
He has no ear for overtones,
No eye for blended hues or dim;
Therefore he earns a name for each,
Dockets our laughter and our moans,
And hurries forth to judge and teach—
The heart of life is hid from him.

—Brian Hooker.

Oh Lawd if yo think we's had snow enuff,
Will yonse please tell the snow to quit snowin';
But if yo' deon think we's had all we needs,
Jes forgive us, O Lawd, fer complainin'.

—T. J. N.

HARDWOOD SITUATION



Both producer and consumer must stop their leaks if the tank is ever again to be filled.

Made Him Sick

Here is a conversation overheard in the elevator of a New York skyscraper between a fussy old lady and the runner:

"Don't you ever feel sick going up and down on this elevator all day?" was the solicitous woman's first question.

"Yes'm," courteously replied the elevator boy. "Is it the motion of the going down?" she wanted to know.

"No'm," answered the boy.

"The going up?" she continued.

"No'm," he again replied.

"Is it the stopping that does it?" she persisted.

"No'm."

"Then what is it?"

"Answerin' questions, Ma'am."

Consoling

"You will be the victim of a fatal accident."

"Good gracious!"

"Calm yourself. It won't happen until the end of your life."—Péte Mêle.

"Promises, like pie-crusts, are easily broken," said a philosopher. But he said it before the railway lunch-counter pie was invented.

A Fair Exchange

The little boy sat by the roadside idly poking the warm dust with his bare toes. When the big man came along the little boy looked up and said:

"Mister, is this your park?"

"What'll you gimme for it?" quizzed the big man.

"Fourteen hunnerd thousan' milyun dollars," replied the little boy.

"All right," smiled the big man; "just take it right along with you."—Youngstown Telegram.

American Forest Trees

ONE HUNDRED-SIXTH PAPER

WESTERN LARCH

(*Larix Occidentalis* Nutt.)

This tree of the northern Rocky Mountain region is of splendid size and symmetrical proportions. Specimens sometimes are two hundred and fifty feet high and six or eight feet in diameter, but the average size is less than half of these figures. Its range lies in Oregon, Washington, and on the upper tributaries of the Columbia river in Idaho, Montana, and British Columbia. It is a limby tree early in life, but later it successfully shades off its lower limbs and a long tapering bole is developed with a very small crown of this foliage. No other tree of its size, with the possible exception of old sequoias, has so little foliage in proportion to the size of the trunk.

The larch is a needle-leaf tree but not an evergreen. Like its eastern cousin, the tamarack, its leaves fall in autumn and the branches are bare until the next spring when little tufts of soft, green needles put in an appearance, springing from wart-like excrescences on the branches. These knobs or warts, about a quarter of an inch across, assist in identifying the tree when the leaves are down. The little excrescences are interesting objects of study. They are stunted twigs which are unable to increase in length but remain as buttons, with all the needles crowded at the ends. The twig which develops on the larch is the terminal shoot. It is clothed all the way down with leaves, there being no occasion for them to crowd on the end as is the case with those which are unable to attain a length of more than a quarter of an inch.

The larch's very small crown, in comparison with the size of its trunk, shows results in the rate of growth after the period of youth has passed. Sometimes such a tree does not increase its trunk diameter as much in forty years as a vigorous loblolly pine or willow oak will in one year. The trunk of a tree, as is well known, grows by means of food manufactured by the leaves and sent down to be transformed into wood. With so few leaves and a trunk so large, the slowness of growth is a natural consequence. Though the annual rings are usually quite narrow, the bands of summerwood are relatively broad. That accounts for the density of larch wood and its great weight. It is six per cent heavier than long-leaf pine, and is not much inferior in strength and elasticity. The leaves are from one to one and three-fourths inches long, the cones from one to one and one-half inches; and the seeds nearly one-fourth inch in length. The latter are equipped with wings of

sufficient power to carry them a short distance from the parent tree.

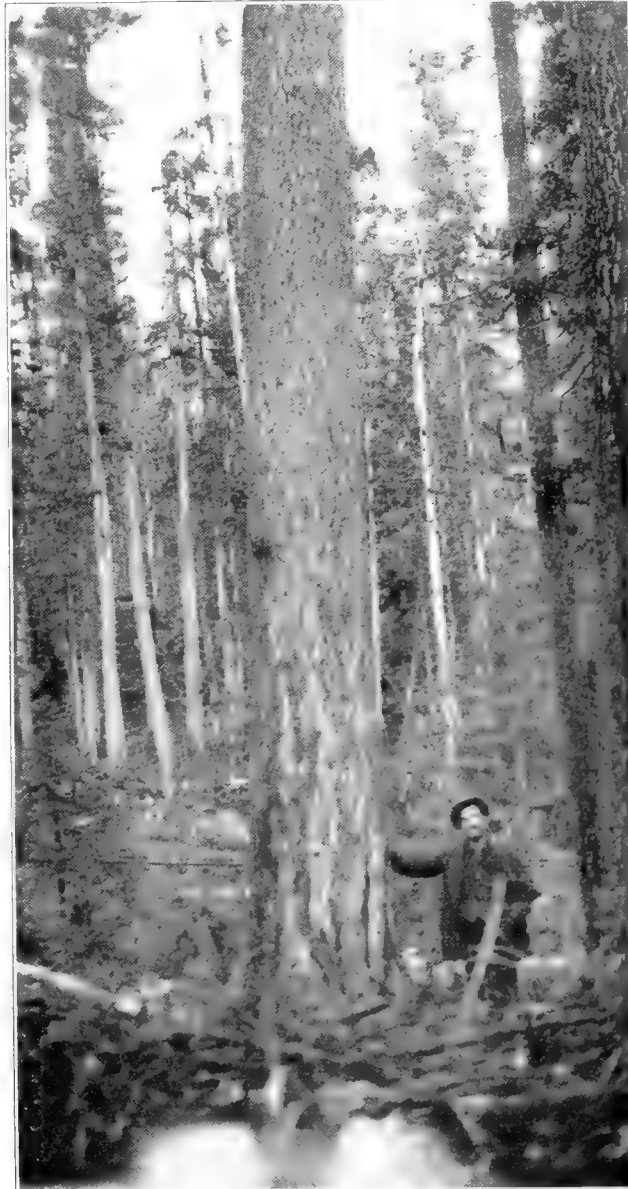
The bark on young larches is thin, but on large trunks, and near the ground, it may be five or six inches thick. When a notch is cut in the trunk it collects a resin of sweetish taste which the Indians use as an article of food.

The western larch reaches its best development in northern Idaho and Montana on streams which flow into Flathead lake. The tree prefers moist bottom lands, but grows well in other situations, at altitudes of from 2,000 to 7,000 feet. The figures given above on this wood's weight, strength and stiffness show its value for manufacturing purposes. Its remoteness from markets has stood in the way of large use, but it has been tried for many purposes and with highly satisfactory results. In 1910 sawmills in the four western states where it grows, cut 255,186,000 feet. Most of this is used as rough lumber, but some is made into furniture, finish, boxes, and boats. The wood has several names, though larch is the most common. It is otherwise known as tamarack and hackmatack, which names are oftener applied to the eastern tree, red American larch, western tamarack, and great western larch.

Some of the annual cut of lumber credited to western larch does not belong to it. Lumbermen have confused names and mixed figures by applying this tree's name to noble fir, which is a different tree. If the fir lumber listed as larch were given its proper name, it would result in lowering the output of larch as shown in statistical figures. In spite of this, however, larch lumber fills an important place in the trade of the northern Rocky Mountain region.

There is little doubt that it will fill a much more important place in the future, for a beginning has scarcely been made in marketing this timber. The available supply is large, but exact figures are not available. Some stands are dense and extensive and the trees are of large size and fine form.

It is not supposed, however, that there will be much after the present stand has been cut, because a second crop from trees of so slow growth will be far in the future. Sudworth says that larch trees from eighteen to twenty inches in diameter are from 250 to 300 years old, and that the ordinary ages of these trees in the forests of the Northwest are from 300 to 500 years; while larger trees are 600 or 700. Much remains to be learned concerning the ages of these trees in different situations and in different parts of



TYPICAL FOREST GROWTH, WESTERN LARCH, WHITE FISIL, MONTANA

the range. It is apparent, however, that when a period covering two or three centuries is required to produce a sawlog of only moderate size, timber owners will not look forward with much eagerness to second growth forests of western larch.

The value of this wood has been the subject of much controversy. In the tables compiled for the Federal census of 1880, under direction of Charles O. S. Sargent, its strength and elasticity were shown to be remarkably high. The figures indicate that it is about forty per cent stronger than white oak and fifty per cent stiffer. This places it a little above longleaf pine in strength and nearly equal to it in stiffness or elasticity. Engineers have expressed doubts as to the correctness of Sargent's figures; they believe them too high. The samples tested by Sargent were six in number, four of them collected in Washington and two in Montana.

The wood of western larch is heavier than longleaf pine, and approximately of the same weight as white oak. It is among the heaviest, if not actually the heaviest, softwoods of the United States. Sargent thus describes the physical properties of the wood: "Heavy, exceedingly hard and strong, rather coarse-grained, compact, satiny, susceptible of a fine polish, very durable in contact with the soil, bands of small summer cells broad, occupying fully half the width of the annual growth, very resinous, dark-colored, conspicuous resin passages few, obscure; medullary rays few, thin; color, light bright red, the thin sapwood nearly white." The wood is described by Sudworth: "Clear, reddish brown, heavy, and fine-grained; commercially valuable; very durable in an unprotected state, differing greatly in this respect from the wood of the eastern larch."

The seasoning of western larch has given lumbermen much trouble. It checks badly and splinters rise from the surface of boards. It is generally admitted that this is the most serious obstacle in the way of securing wide utilization for the wood. The structure of the annual ring is reason for believing that there is slight adhesion between the springwood and that of the late season. Checks are very numerous, parallel with the growth rings, and splinters part from the board along the same lines. Standing timber is frequently wind-shaken, and the cracks follow the rings.

All of this is presumptuous evidence that the principal defect of larch is a lack of adhesion between the early and the late wood. If that is true, it is a fundamental defect in the growing tree, and is inherent in the wood. No artificial treatment can wholly remove it. It should not be considered impossible, however, to devise methods of seasoning which would not accentuate the weaknesses natural to the wood.

The form of the larch's trunk is perfect, from the lumberman's viewpoint, and its size is all that could be desired. It is amply able to perpetuate its species, though it consumes a great deal of time in the process. Abundant crops of seeds are borne, but only once in several years. It rarely bears seeds as early as its twenty-fifth year, and generally not until it passes forty; but its fruitful period is long, extending over several centuries. The seeds retain their vitality moderately well, which is an important consideration in view of the tree's habit of opening and closing its cones alternately as the weather happens to be damp or dry. The dispersion of seeds extends over a considerable part of the season, and the changing winds scatter them in all directions. Many seeds fall on the snow in winter to be let down on the damp ground ready to germinate during the early spring. The best germination occurs on mineral soil, and this is often found in areas recently bared by fire. Lodgepole pine contends also for this ground but the race between the two species is not swift after the process of scattering seeds has been completed; for both are of growth so exceedingly slow that a hundred years will scarcely tell which is gaining. In the long run, however, the larch outstrips the pine and becomes a larger tree. If both start at the same time, and there is not room for both, the pine will kill the larch by shading it. The latter's thin foliage renders it incapable of casting a shadow dense enough to hurt the pine. The best areas for larch are those so thoroughly burned as to preclude the immediate heavy reproduction of lodgepole pine.

Many of the natural ranges of larch and lodgepole pine lie in the national forests owned by the government, and careful studies have been made in recent years to determine the requirements, and the actual and comparative values of the two species. It has been shown that larch is one of the most intolerant of the western forest trees. It cannot endure shade. Its own thin foliage, where it occurs in pure stands, is sufficient to shade off the lower limbs of boles and produce tall, clean trunks; but if a larch happens to stand in the open, where light is abundant, it retains its branches almost to the ground. It is more intolerant, even, than western yellow pine, which so often grows in open, park-like stands, and that habit has had much to do with the form and value of larch timber.

Confusion of Common Names Sometimes Serious

The following paragraph is copied from a report prepared by an American college professor, who is now in Brazil making a study of the timber resources of that country:

"*Cedro clara* (*Cedrela brasiliensis*) Meliaceæ. Like the cedars of the United States, this wood is light, not too strong perhaps, but adapted to all the uses common to our cedar, like the making of lead pencils. It is used here, very extensively, for posts, because of its resistance to weather. It is very common all over Brazil and will soon form an important article of commerce. The trees are sometimes immense, but the wood appears sound and as valuable as that from smaller specimens. As to lead pencils, it is to be noted that there is an extensive though at present unworked mine of plumbago in the state of Ceara close to an extensive forest of this wood, and that, too, with plenty of undeveloped water power at hand. Who will make the combination and at the same time a fortune?"

It would be difficult to find more errors combined in a single paragraph than appear in this one, which was intended to inform lead pencil manufacturers of the nature of a wood designed to take the place of our gradually diminishing pencil cedar. It is quite evident that the author of this report on Brazilian woods did not examine very closely the wood of this "*cedro clara*" or he would have observed that it does not at all resemble the pencil cedars indigenous to the United States. Such mistakes and confusions are the direct result of popular plant naming, and it may be worth while to give here the reason why the name "*cedar*" has come to be applied to these unrelated tropical hardwoods (*Cedrelas*). The Spanish cedar (*Cedrela odorata*) has a characteristic odor resembling the cedars (*Juniperus*, *Thuja*, *Libocedrus*, etc.) of the United States, and for this reason it was called cedar or "*cedro*" by the early Spanish settlers in the American tropics. In order to distinguish it, however, from the true cedars it is generally referred to as Spanish or cigar-box cedar, or "*cedro clara*" in the case of the Brazilian species. There are more than a dozen species of the genus *Cedrela* and all closely resemble the Spanish cedar and are generally called "*cedro*."

The Brazilian species, which is an important tree and has an extensive distribution, yields a wood that is used for every purpose for which the Spanish cedar is employed, but so far as American and European pencil manufacturers are concerned, it has never been available for use as a lead pencil wood. Here is, therefore, a case in which the author of the report has failed to realize that though of the same name these woods possess entirely different characters from those of our native cedars, all of which are soft woods, that is to say, woods of the cone-bearing trees. This confusion of knowledge of common names of trees and the lack of understanding the structural relations of the different woods led to very misleading statements. The proposition as outlined by the college professor is a very tempting one for those who dare to venture on a project with as little definite knowledge as contained in the above extract. While the combination of extensive supply of plumbago, timber and water is easily made, the fortune is probably not so readily attained.

L. L. D.



An Analysis of Durability



Durability as applied to wood, broadly defined, means the ability to resist decay or, more specifically, it is the length of time which a piece of wood under given conditions resists the influences of decay. Durability is frequently the determining factor in the value of timbers for certain purposes and is also a prerequisite along with other technical qualities for many uses. For instance, railway sleepers must not only be durable but must be sufficiently hard, tough and strong to resist the impact and wearing strain of the heavy traffic on the rails. The length of life in the purpose which they serve determines the relative value of timbers used for telephone and telegraph poles, piling material for wharves and foundations, posts, ties, shingles, sills, structural material and many other uses to which wood is put. Not only does durability apply to wood used in contact with the soil but also to practically every way in which wood is used where it is subject to deteriorating influences.

All kinds of wood are durable under certain conditions. Whenever the three elements of heat, moisture and oxygen are absent, either collectively or individually, wood will last indefinitely. For instance, if timbers are submerged underneath the surface of the ground or water there will be no decay possible. Piles of the ancient lake dwellers in parts of Europe that must have been driven at least two thousand years ago have been unearthed and found to be intact. Pieces of pine of unknown age in good condition have been dug up from holes sixty feet in the earth in the Central West. It is reported that some old piling that Caesar used in crossing certain rivers of France have been exposed and found to be in splendid condition.

On our lumber markets the durability of certain species is recognized by the high prices which they command. There is seldom, however, an understanding of the qualities which determine that particular characteristic. Prices are usually directly dependent upon the lasting qualities for certain purposes such as ties, wagon bottoms, poles, structural timbers, etc.

Whenever the influences of decay as mentioned are removed, the duration of the life of wood is indefinite. Moisture and oxygen may be present, but if heat is absent timbers will not decay. It is the constant change of heat and moisture conditions in our atmosphere that determines largely the life of most of our timbers. For instance, furniture in a house will last indefinitely or until it wears out or breaks apart—decay does not set in because of the even temperature conditions and the absence of moisture. Wood in damp places rots readily because of the presence of both moisture and heat, which together with oxygen in the air are conducive to the growth of minute organisms. This explains why beech furniture will last indefinitely, while beech ties will only last from three to five years. This also explains why timbers last a great deal longer in dry, hot climates such as in the desert regions of the Southwest than they do in the East, where there is greater relative humidity in the air, greater precipitation and greater seasonal changes of climate.

In discussing the relative durability of timber, therefore, we may divide the influences of decay into two broad divisions,—the external and the internal influences.

EXTERNAL INFLUENCES OF DECAY

The principal external influence of decay consists of literally hundreds of minute living organisms called bacteria and fungi.

These cause not only the usual rotting of timbers before being cut in the forest but also those after being manufactured and utilized. The common names applied to the various forms of this decay are "dry rot," "red rot," "punk," "peckiness," "bluing," etc. The external evidence of these fungi are the fruiting bodies, commonly occurring in shelflike form which scatter their microscopical seeds, called spores, through the air to other wood. These spores develop into living organisms, spread out and form a perfect network in the wood, dissolving the woody structure and cell contents for food and for their further propagation. In

the case of "bluing" the fungus confines itself to consuming the starch in the cells and merely leaves a stain. Some fungi attack only certain conifers, others confine themselves to hardwoods. Occasionally some varieties confine their depredations to a single species, but more usually propagate on a variety of woods. Some work from the sap inwards and others attack the heartwood first and cause the heart-rot so common in some of our trees. The timbers that are most susceptible to attack are those that on account of warping or checking or through some fire scar or mechanical injury, have a fissure opened in the wood fibers for the entrance of the fungi. This is the reason why it is well to apply an external preventative or preservative such as corrosive sublimate (mercuric chloride) to prevent sap staining.

Fungous growths are retarded by cold temperatures and by lessening the moisture content. This is why timbers are more susceptible to decay by rot in the South than in Minnesota, for example. It also explains why seasoned lumber is less readily attacked by fungi. If the moisture content can be maintained at less than ten per cent, timbers are immune from decay. Extreme heat or temperatures over 150 degrees F. also kill or prevent the further development of fungous growths. It is said that temperatures of from 65 degrees to 100 degrees F. are most conducive and favorable to the spread and injurious effects of these organisms. Wood, however, exhibits a strong absorptive ability and after kiln-drying, lumber should be kept as dry as possible to prevent the re-entrance of moisture in the fibers and a consequent susceptibility to fungous attacks.

Besides the external influence of living organisms, the presence of water in the soil, the physical characteristics of the soil and the condition of the atmosphere all have a strong bearing on the durability of timbers. If a pole or post is kept in a constantly moist or wet soil it will last much longer than if placed in an alternating dry and wet soil. This is equally true of changing atmosphere and explains why a tie, placed partly beneath the ground, will check badly. In a stiff clay soil a pole or post usually rots at the ground line, whereas in a sandy or porous soil the wood will be affected down to its base. Some fungi attack the heart first and the wood is rotted gradually from the center out, and in others the reverse is true. However, the sapwood generally decays and rots away first, owing to the greater per cent of moisture contained in it and therefore to the fact that it is more inviting to the work of the decaying influence. Wood painted or tarred before proper seasoning is likely to be attacked by "dry rot," for the spores of the fungus are sure to be present and are protected from the drying out process so that they can do their work quicker than if the wood were not painted. Charring posts prevents decay because the charcoal resists the solvents of fungi and prevents its spread into the wood.

Durability is also determined to a certain extent by the method of usage and by external wear and tear. For example, paving blocks are laid with their transverse sections upwards because the radial or tangential faces are more susceptible to wearing.

Insects, beetles, etc., also have a certain relation to durability but are a mechanical influence which presents a different problem. The powder post beetle is the most prominent of the group and works considerable damage through its attacks on the sapwood, particularly of such woods as hickory, oak, ash, etc. The teredo or marine borer is also a powerful enemy of our wharf piling and determines the life of timbers used in salt waters in the warmer climates.

INTERNAL INFLUENCES OF DECAY

The internal influences which determine the rate of decay of timbers are largely chemical rather than physical. It has been demonstrated that there is no direct correlation between the principal physical characteristics which go to make up the value of woods used where durability is not a determinant factor. Thus weight, strength, stiffness, hardness, toughness, elasticity, etc., do

not apparently exert any influence upon the lasting qualities of timbers other than to offset the effects of abrasion, impact and other influences of wear and tear. In these cases it is apparent that specific gravity and hardness are important; but in discussing durability the chief consideration is the duration of life under ordinary conditions of usage. To illustrate the above, hickory and hard maple, two of our hardest and heaviest of woods (specific gravity 84 and 69 respectively), are classed among our perishable woods. The American elm, our toughest common wood, is also short-lived when brought into contact with the soil or under the presence of usual atmospheric changes. Four of our weakest and softest woods, redwood, northern white cedar, western red cedar and catalpa, may be classed among the most durable. These are also some of our lightest woods, having specific gravities respectively of .21 (*Sequoia washingtoniana*), .32 (*Thuja occidentalis*), .38 (*Thuja plicata*) and .42 (*Catalpa speciosa*).

The principal internal influences which determine durability, therefore, must be found in the chemical constitution of the wood. In this respect, coloration, particularly of the heartwood, is the best direct outward evidence of the chemical nature of the durability of wood fibers. What, then, determines coloration? This is to be found in the relative amounts of tannin contained in the wood elements. Besides tannin, the resins, gums and other similar compounds found in wood are antiseptic in their nature and therefore have a direct bearing on the durable qualities of the wood in which they are contained. A German investigator, Heinrich Mayr, states that the more intense the color of heartwood the more durable it is. This is easily borne out by mentioning some of our species of deeply colored heartwood, the durable qualities of which are well known—ebony, lignum-vitæ, rosewood, catalpa, red cedar, the sequoias or redwoods, black locust, Osage orange, yew, etc. As opposed to these, some of our common species with a light-colored heart are among our most perishable woods, namely, horse chestnut, basswood, maple, cottonwood, tupelo, hickory, spruce, balsam, etc. To be sure, there are exceptions to this general rule, but, as with most rules, they only help to prove it. Tannin is formed by oxidation in the tissues in the zone between the sapwood and heartwood as the water gradually disappears from the cells and oxygen is admitted. The gradual darkening of the heartwood after being cut and exposed to the atmosphere is a good illustration of the process of oxidation. Color is to a certain degree dependent upon illumination of the foliage of the tree. Hence, color is deepest in the branches near the point of illumination, not so deep in the bole of the tree and even more pale in the roots. Wood from trees grown in full sunlight is more deeply colored than that from those in a dense forest and is therefore likely to be more durable. In this same connection, tropical woods are likely to be more durable than those grown in a more northerly climate; so that trees from the same species are more durable when grown in the southern than in the northern extremity of its range. Chestnut wood contains from five to ten per cent of tannin. Turpentine, one of the ethereal oils of wood, becomes oxidized into rosin, which adds considerably to the durability. The added presence of gums is a great factor in rendering wood antiseptic against the bacterial and fungous influences of decay.

Sapwood is obviously less durable than heartwood, both on account of its saturation with moisture and its lack of protective chemical constituents such as tannins, resin, gums, etc., which are usually found in heartwood. The writer has seen cypress and tupelo logs unearthed from a vegetative covering in the swamps along the Choctawatchie river in Florida that, with the exception of the sap which had rotted off, were perfectly sound and yielded splendid grades of lumber. Larch logs have also been uncovered in northern Idaho, that were lying prostrate along the ground under western red cedar trees that were up to 150 years of age. Only the thin sapwood had rotted off, probably before the covering which excluded the oxygen was complete.

There is no direct interrelation between rapidity of growth and durability except within a species. That is, a rapidly grown piece of oak is not likely to be as durable as one which grew much

slower, yet species which inherently grow rapidly, such as black locust, catalpa and chestnut, are found to be durable as well as slow-growing trees, such as longleaf pine, cypress, red cedar, etc. What makes one species more durable than another can only be explained by its inherent qualification to have contained within its heartwood those chemical elements which resist the influences of decay.

The above discussion has been devoted to the question of natural durability. Artificial durability as applied to timbers has been introduced as a result of the growing scarcity and consequent rise in value of our forest products. This is a big subject and although closely allied to the question of durability, the preservation of timbers by artificial means deserves consideration by itself. Suffice it to mention the principal means of increasing the natural durability of wood, which are special methods of seasoning (such as steaming and smoking), charring the surface of wood that is brought into contact with the soil, painting, tarring and the impregnation of chemical preservatives into the wood fibers.

The state forester of Ohio has recently published the result of an exhaustive investigation of the relative durability of several species used for post material, under a wide range of conditions. This list shows the following species, given in order of durability: Osage orange, black locust, red cedar, mulberry, white cedar, catalpa, chestnut, white oak and black ash.

The following list is offered to show the comparative durability of some of our American timbers by groups. This is not presumed to obtain for all conditions, because it is too well known that there is a considerable lack of uniformity in the durable qualities of woods even within the same species and under similar conditions of placement.

VERY DURABLE

HARDWOODS.

Black locust.
Catalpa.
Mahogany.
Osage orange.
Mulberry.
Chestnut.
Black walnut.
Live oak.
Sassafras.

CONIFERS.

Incense cedar.
Cypress.
Western yew.
Arbor vitae.
Western red cedar.
Redwood.
Southern white cedar.
Lawson cypress.

DURABLE

White oak.
Post oak.
Black ash.
Honey locust.
Cherry.
Persimmon.
Red elm.
Bur oak.

Longleaf pine.
Cuban pine.
Eastern larch.
Western larch.
Douglas fir.

INTERMEDIATE

Yellow poplar.
Red ash.
Red oak.
Scarlet oak.
Butternut.

White pine.
Norway pine.
Sugar pine.
Shortleaf pine.

PERISHABLE

Cottonwood.
White elm.
Red gum.
Hard maple.
White ash.
Black oak.
Red birch.
Beech.
Hickory.
Cucumber.

Loblolly pine.
Red spruce.
Hemlock.
Western hemlock.
Sitka spruce.
Noble fir.
Engelmann spruce.
Pitch pine.

VERY PERISHABLE

Black gum.
Water gum.
Basswood.
Buckeye.
Sycamore.
Grey birch.
Paper birch.
Aspen.
Willow.

Lodgepole pine.
Jack pine.
White spruce.
Balsam fir.
White fir.



WASTE IN CUTTING GUM FOR COOPERAGE



WASTE IN THE MANUFACTURE OF STAVES AND HEADING



Sources of Hardwood Waste



"Slack cooperage stock" is the term applied to the material or parts used by coopers in assembling slack barrels, kegs, hogsheads, tubs, kits and firkins, and includes staves, heading and hoops. In general, slack cooperage stock is distinguished from that of tight cooperage by the fact that the receptacles made from it are not intended for holding liquids. There is a wide range, however, between the character of slack cooperage receptacles and those which will hold firm, solid substances like vegetables to fine, powdery substances such as flour.

The waste resulting from the manufacture of cooperage stock is generally conceded to be greater than that from the manufacture of any other product. It is estimated by one investigator that as much as forty-five per cent of the material for staves and hoops and seventy-four per cent of that for heading is not used. Owing, however, to the low grade of material which it is possible to utilize in some parts of the industry, material which would in many cases be a total loss unless so utilized, the matter is not as serious as the figures would indicate. A considerable part of this waste could be prevented, and as values increase with decreased supply of material, utilization will become more nearly complete.

The nature and extent of the waste depends upon whether it occurs in the yard or in the mill. The greatest waste occurs in the woods and is due to carelessness and lack of supervision. High stumps and excessively long top sections are responsible for the loss of from one to several stave or heading blocks on a large proportion of the trees cut by some operators. Often knotty logs with considerable merchantable material in them are left on the ground to decay. It is best to work up timber as soon as possible after it is cut, because then it is more easily worked, stands better the strain of bending and looks brighter. This is an important point which is often neglected, and hundreds of logs are wasted because they are left too long in the woods or in the yard, and thousands of staves are shaky, dull and brash, because they are made from that kind of trunks. Red gum logs in particular are very liable to sap stain if cut in summer and left in damp situations for a time. This is not due to any greater sap content but to the more favorable conditions for the development of fungi.

A loss which amounts to a great deal in the aggregate is due to improper cutting lengths of the logs. As summed up by the National Conservation Commission: "Logs intended for staves are cut in the woods to lengths which are multiples of thirty-two inches, because of poor judgment of the workman or wood superintendent, and it is often found necessary to utilize at the mill

for heading material which was cut in the woods for staves. In logs which were cut for six-stave lengths the waste, if it is found necessary to utilize this for heading, is three inches to the log. If, on the other hand, the log were cut for five-stave lengths, the waste, if it is found necessary to use this for heading, is thirteen inches. Not infrequently, through carelessness of workmen, logs are cut too short in the woods and the last block must be thrown out at the mill."

A large majority of the manufacturers of slack cooperage stock specialize in making only one of the parts of which a barrel or other receptacle is composed. Thus one establishment will make staves, another heading and another hoops. A few concerns make two of these parts, but rarely are all three produced by the same concern. One reason for this condition is that the different parts require different kinds of wood and usually all three kinds are not available to one plant. This is unfortunate, for it is to this specializing that much waste is due. For instance, logs that will not make good hoops will frequently make good staves and logs or portions of them which are not suitable for staves will often make very good heading. Where the industries cannot be combined it would appear good business to include other manufactures to utilize the odds and ends left over. When timber is cheap, however, the increased cost of articles made from scraps will usually more than offset the saving in the cost of material, making such side lines impracticable.

It is the usual practice in making slack staves and heading to cut the log into blocks in the mill and then saw them into bolts. In some mills, however, the whole log is first sawed into quarters or sixths and these long bolts are then cut into stave or heading lengths by a small cut-off saw. This is inadvisable, since each block should be handled separately if bolts are to be secured from which prime staves can be cut. The method of first quartering the whole log before cutting into blocks does not take into account variations in the grain and provides no way for tipping and turning the log to get the bolts into the best form.

The bigger the log the greater the percentage of No. 1 staves that can be obtained from it, and since it costs as much to manufacture No. 2 staves as it does the best quality, small logs are not in great demand. If too small to quarter they will produce too many "washboards." This fact tends to increase the waste in the woods unless the stave mill also makes heading, because considerably smaller logs can be used for heading than are practicable for staves. Since nearly all slack cooperage staves are



RED GUM LOGS DAMAGED BY FUNGI BECAUSE LEFT TOO LONG IN THE WOODS AFTER CUTTING



OAK LOGS CHECKED BECAUSE THEY WERE ALLOWED TO LIE TOO LONG BEFORE THEY WERE CUT

cut with a knife and not sawed from the bolts, there is a minimum of waste from that source.

It is rather unusual for bolts to be split, though this method assures straight-grained stock, while the straightness of grain of sawn bolts depends upon the skill of the man at the bolting saw. Any advantage due to splitting is far outweighed by the excessive waste which results in cutting the staves, as the first two and last two staves from every split bolt must be culled because the sides of the bolts are so uneven. A comparative test of the two methods was made by a manufacturer in New York state, who found that nine cords of sawn bolts gave 12,000 $\frac{3}{4}$ -inch staves, while an equal amount of split bolts furnished only 10,000 staves of the same thickness.

The stave cutter is or should be the most skilled employe in a cooperage mill, because he must know how to handle each individual bolt so as to get the best quality of staves in the shortest time. At best there are numerous staves thrown out because too defective to go into the regular grades. The number of such staves increase in inverse ratio with the skill of the cutter. They are generally used for fuel, though sometimes they are shortened for kegs or part of them may be used to cover the stave piles in the yard. An unavoidable waste at the stave knife occurs from the thin slabs that are left and which are usually used for fuel.

When staves are fresh from the cutter they are saturated with water due in part to the greenness of the wood and also to the steaming process which softens them. It is necessary that they be dried quickly to prevent mold but not so rapidly that they would be badly checked and warped. In piling the staves the piles should be located on dry ground and should have air holes at the bottom and openings at the top to allow a free circulation of air. The individual piles should be separate and arranged parallel. In no case should the staves be put directly on the ground, and the upper tier should be covered with culled staves, bark or a roof to afford protection from sun and rain. This will preserve the bright appearance which is so essential in certain branches of the trade, such as flour and sugar barrels.

Warping and loss of circle can be prevented by choosing a ply suitable to the weather conditions and to the tendency of the species to warp. Care should be exercised to keep the pile perfectly level up to the top layer, which may serve as a roof to shed the rain. Since loss of circle is most likely to occur when the staves are fresh from the knife the plan is sometimes followed of setting the staves loosely on edge for from a few days up to a couple of weeks before placing them in the regular piles. This increases the cost somewhat but very satisfactory results are obtained.

After staves have been air-dried for sixty days or more, depending upon the locality and the season of the year, they are jointed

or trimmed so as to have proper bilge and smooth edges. If the staves are not thoroughly seasoned the joint is liable to warp and twist upon subsequent drying. The work of the jointer is very important, but too often he is not as careful as he should be and occasions excessive waste in trimmings or "listings," as they are called, or by poor grading. Some woods are very hard to cut and may contain knots, and there is a strong temptation for the jointer to throw imperfect staves in the fuel pile, whereas with a little more work and care the knots could be cut off and merchantable staves secured. For instance, at a mill in Michigan out of two lots of 17,000 staves each, 3,000 and 2,500 staves, respectively, were culled, a considerable number of which the jointer admitted could have been saved.

In sawing heading it is a common practice first to pull the bark off the blocks by means of a rosser knife. In some mills, however, the blocks are sawed with the bark on and then passed through an old stave jointing machine to trim the edges. By this method it is claimed that the boards have better edges, occupy less space in the kiln, are easier to joint later, and the work can be done chiefly by a boy and an old machine. It has also been suggested that heading be surfaced before kiln-drying, as it is easier done then and is believed to hasten drying.

Sawn heading boards are piled in the yard to air-season for from sixty to ninety days before going into the kiln. Not infrequently, however, rush orders make it necessary to dispense with the air-seasoning, and in the case of the denser hardwoods there is likely to be considerable loss from checking and warping. This can be overcome, in part at least, by proper regulation of the drying by means of moist air and low temperatures at first. As an example of the loss sometimes sustained may be mentioned the statement of a mill superintendent in New York to the effect that heading boards dried in the yard and then in the kiln would average eighty per cent No. 1, while if dried in kiln direct from the saw only fifty per cent No. 1 would be secured. This is explained by the fact that wood is a very poor conductor of heat and if green material is exposed to a hot, dry atmosphere the evaporation from the surface will be very rapid, while that of the interior will follow slowly. For this reason, shrinkage, which always accompanies drying, proceeds irregularly and the fibers are torn apart. By regulating the humidity of the air in the kiln the evaporation can be retarded until the wood is heated through and through, so that subsequent loss of moisture will be gradual and the shrinkage uniform.

To secure good work at the heading jointer it is important to see that the wheel is kept free from sawdust, that all parts are equally balanced, that the knives are of equal sharpness and the handling is always careful. When hardwoods are used it is often difficult to obtain tight joints when matched, making it desirable

to combine a soft material like basswood with a harder such as maple. Tying crates of heading with wire instead of tin strips often causes damage by cutting into the wood.

The common method of sawing heading boards is "through and through," except in the case of large logs which are first quartered. In small logs with a defective core the middle boards are too narrow for good heading. This can be overcome by cutting boards from three sides, leaving a three-cornered piece at the middle. It requires more time, however, than the usual method, but wider boards are secured.

One of the principal sources of waste is in turning heading, the loss amounting to from twenty-five to thirty per cent of the volume of the heading boards. Most of this appears to be unavoidable. There is also waste from cutting twenty-one-inch lengths when heading only nineteen inches or less in diameter is to be circled out. Some oversize is desirable in order to avoid season checks at the ends. There is also a waste of at least one heading board for every block, due to inability to hold a thin slab against the saw.

There is the same need for care in piling heading as in staves. The piles should be open enough to permit a ready circulation of air, should be raised off the ground, should have air spaces between them and be covered. Many a pile of good heading has been ruined or badly damaged by mold through failure to take proper precautions.

Three kinds of wooden hoops are used in slack cooperage production, namely, "patent" hoops, which are either cut or sawn from planks (usually elm) by special machines; flat or "racked" hoops, which are split in flat layers from black ash; and round hoops, which are made by dividing young saplings of a tough and pliable nature like hickory, birch, beech and maple. Only the "patent" hoops will be considered here.

A better grade of timber is required for the manufacture of hoops than for staves and heading. There is only one grade of hoops, while there are at least three for staves and heading. Consequently the presence of knots and defects causes material to be sent to the scrap pile which could be utilized for staves or heading if the mills were equipped to handle it. Hoop blocks are at least six feet long and a knot in a plank causes a strip of equal width and six feet long to be wasted. In cutting up logs for hoops if there happens to be a piece less than six feet long it is culled, though it would probably make first-grade staves or heading.

Imperfect hoops and those broken in coiling are usually consigned to the scrap pile. In some mills, however, this material is made into head liners. This is accomplished by passing them through a machine which saws them in two lengthwise and leaves them with the proper curve. One company figures its daily net profit from this source at \$3.50.

Hoops are air-dried after being coiled and care has to be taken that the coils are properly piled if mold is to be avoided. Hoops from sapwood appear to be most subject to mold and under conditions favorable to the development of fungi will become spotted within less than a week. The coiled hoops should be placed in piles raised off of the ground and shedded over to keep out rain. Kiln-drying is not practiced because it seems to reduce the pliability of the hoops and to render them more liable to break.

The foregoing suggestions are made with a view of stimulating interest in the closest practicable utilization of timber in the slack cooperage business. Some plants are already doing all that could be desired, but others are not yet practicing the various economies which make for increased efficiency and profits, and prolong the present supply of material. There is room for considerable practical reform along that line.

J. R. S.



Eliminating One Loss at the Sawmill



A German importer of American hardwoods took occasion recently to "roast" lumber manufacturers in this country for their waste of material for the sake of securing quantity output. He declared that logs shot through mills in the United States are literally "chewed up," and that the loss in the woodworking factory or planing mill, when the varying thickness of badly manufactured boards has to be equalized, more than offsets the possible saving made through reducing labor expenses by getting a maximum production at the sawmill.

There is a good deal of truth in the criticism, though it is probable that a considerable exaggeration was indulged in in dealing with conditions over here. Of course, the small country mills which operate more with regard to cutting the logs up than with turning out perfectly manufactured stock, are to blame for putting on the market a lot of extremely poor lumber; but when it comes to high-grade quartered oak, for instance, there is comparatively little loss of the kind complained of.

On the other hand, some lumbermen are rather careless in another way that is almost as serious as the one referred to. That is in cutting lumber thicker than is really necessary. The allowance for shrinking in seasoning is usually over-conservative, and a manufacturer operating a large mill in the Central South conceded not long ago that he was losing several thousand dollars a year because of cutting his oak thicker than the situation demanded.

It is an interesting fact that there are few accurate statistics available on the subject of loss of thickness from drying. Consequently each lumberman has to be his own arbiter in the matter, and the results obtained by experience are depended upon altogether. Of course, such results are usually more satisfactory than any other kind, but they involve a certain amount of incidental expense during the time that experimentation is in progress. And if this element of expense can be eliminated, so much the better for the lumberman.

The chief trouble about using other people's figures on a proposition of this kind is that they are not always correct, as far as the conditions of the user are concerned. That is to say, an Indiana lumberman cutting quartered oak might find that $1\frac{1}{8}$ -inch was sufficiently thick to enable him to take care of shrinkage during the full drying period of from four to six months; while a southern manufacturer who tried that experiment possibly would find that he had allowed too little, and that he was shipping oak that didn't measure an inch full. And it is rather embarrassing to have a car of lumber turned down because of being a "scant inch" in thickness when the buyer wanted a full or "plump" inch to work on.

In fact, some southern mills, in order to be on the safe side, allow as much as $\frac{1}{8}$ -inch, or in extreme cases $\frac{1}{4}$ -inch on their quartered oak, finding that the liberal allowance is none too much when the stock is going to dry out for a considerable period; for of course the length of time it is to remain on sticks will have a good deal to do with it. Some stock which is kept longer than had been anticipated might lose a trifle more than the allowance, although this is usually figured on a basis which will take care of about all of the shrinkage which will result from the drying process.

On the other hand, there are lumber manufacturers with mills in the South who insist that $\frac{3}{32}$ -inch is a sufficient allowance for shrinkage, and that making twice this allowance, as indicated above, is simply throwing that much lumber away, as far as its value to the manufacturer is concerned. Here again it is evident that the millmen might compare notes to advantage and make their decision as to the dimension to saw accordingly. If $\frac{3}{32}$ -inch is enough, then, obviously, $\frac{1}{8}$ -inch is 100 per cent too much; and, on the other hand, if the larger allowance is needed in order to take care of the shrinkage, the use of the smaller means taking a dangerous chance which may result ultimately in heavy loss through rejections or for some other cause.

The character of the lumber being manufactured of course has a great deal to do with it. Quartered oak shrinks more on the heart side, of course, than on the other, if it is inclined to be porous, and this would require a greater allowance than would otherwise be needed. Such a condition may affect the quartering of such woods as red oak grown in the lowlands of the South. Manufacturers of oak farther north have no trouble owing to undue shrinkage on the heart side of quartered stock, but this consideration may be one applying to the proposition of quartering southern red oak, and may explain to some extent why not a great deal of red oak in that territory is being quartered.

Conversely with the shrinking of quartered oak in thickness, plain oak shrinks chiefly in width; and consequently the allowance for plain oak need not be so great as for quartered. In practice, however, most manufacturers in the central hardwood belt allow $\frac{1}{8}$ -inch for both plain and quartered oak, finding that this applies to plain equally with quartered, as far as taking care of the shrinkage is concerned; but it is reasonable to believe in a case of this kind that the quartered oak might occasionally be a trifle scant and that the plain oak boards would come closer to measuring a full inch every time.

Apparently, though, there is no good reason in favor of allowing as much as $\frac{1}{8}$ -inch for oak; even that made in the territory farther south; and judging from the recent decision of the manufacturer referred to above, who believes that he is going to save a good many dollars' worth of valuable lumber by sawing it at least $\frac{1}{32}$ -inch thinner than he has been doing, it might be worth while for others who are making a similarly liberal allowance to make a few experiments and determine the results. This particular mill is cutting practically all plain oak, too; so that while cutting quartered $1\frac{1}{8}$ -inch thick might be a debatable proposition, there hardly seems to be any good reason in favor of manufacturing plain oak as thick as that.

A mahogany mill which cuts up a lot of lumber has recently changed its practice in this connection. It seems that it has been in the habit of allowing $\frac{1}{8}$ -inch for shrinkage; but experiments have been made and have shown that the actual shrinkage is not over $\frac{1}{32}$ -inch, and consequently the allowance hereafter will be exactly half that heretofore in vogue. In the case of a high-priced wood like mahogany, which is so valuable that it is sold by the foot, the necessity of extreme care is even more certain than where oak is concerned, although with timber prices rising steadily on the domestic wood there are plenty of good arguments in favor of a similar amount of discretion at the saw when cutting up oak logs.

It is said that another well-known mahogany concern has recently been experimenting to determine the amount of shrinkage to which the boards are subjected as to width, with the idea of developing a plan whereby the number of odd widths may be reduced to a minimum. The plan has not yet been worked out to a final conclusion, and to a man up a tree the exact method to be followed does not appear to be plain. However, the fact that efforts are being bent to this end simply goes to show that progressive lumber manufacturers are overlooking no opportunity to cut their stock along scientific, accurate lines, so as to avoid whatever waste can be eliminated.

The thing to remember in studying the shrinkage problem is that it does nobody any good to send out lumber that is thicker than necessary. On the other hand, it is a positive disadvantage in a large number of cases. For example, a concern which is working up oak, and wants it to finish $\frac{7}{8}$ -inch, would buy 1-inch lumber, knowing that the additional $\frac{1}{8}$ -inch would take care of the loss in working; but if the lumber actually delivered were $1\frac{1}{8}$ -inch in thickness, it would require just that much more effort and expense, as well as wear and tear on the planer, to dress it down to the required thickness, and to that extent would be undesirable.

The error can probably be more safely made on the side of scantiness, in view of the fact that the standard cabinet thickness is $\frac{1}{2}$ -inch, and hence a furniture manufacturer would probably not object to getting $\frac{1}{8}$ -inch lumber for inch. The export trade will

often receive $\frac{7}{8}$ -inch or even $\frac{1}{2}$ -inch lumber for inch, though its requirements as to accurate manufacture are strict, so that there are plenty of opportunities to work off stock which has dried a little thinner than the rules and regulations provide, but of course if one is selling inch lumber it is better to have inch lumber to deliver, as by this policy there is no opportunity for misunderstandings to happen.

Showing the variety of practice on this subject, a recent conversation participated in by three well-known lumbermen developed the fact that one allowed $\frac{3}{32}$ -inch for his inch quartered oak and $\frac{1}{8}$ -inch for his plain; the second cut all of his oak, both quartered and plain, $\frac{1}{8}$ -inch full, and the third allowed $\frac{1}{8}$ -inch for oak, poplar and chestnut that he expected to leave on sticks for six months.

Which had the right idea?

G. D. C., Jr.

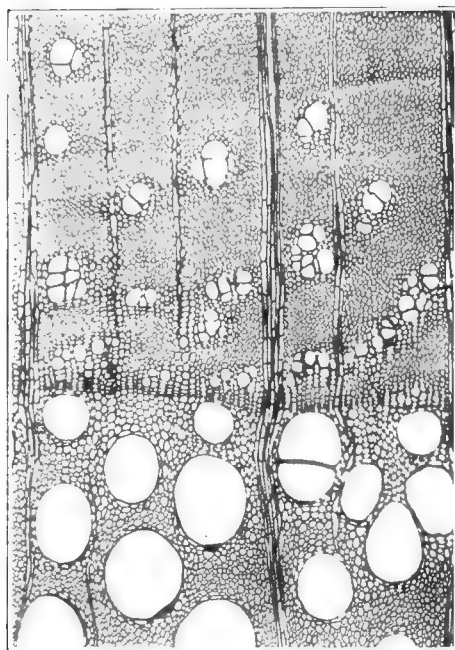
A Remedy for Chestnut Blight

The Pennsylvania Blight Commission, which was appointed to combat the disease which is killing the chestnut in large areas of the East, announces that it has found a cure and a preventative. Up to the present, however, the remedy seems to have been tried only on isolated trees, valuable for shade and ornament, and not on forest-grown chestnut such as exists where this species is lumbered. The remedy found for park and yard trees will doubtless do the work as well in the forest, provided it is applied in the same way; but the item of cost is a very important matter and it may stand in the way of securing practical results. Nevertheless, any step in the direction of control of the blight will be welcome. If it is effective on a small scale it may be found practicable to apply it under less favorable conditions.

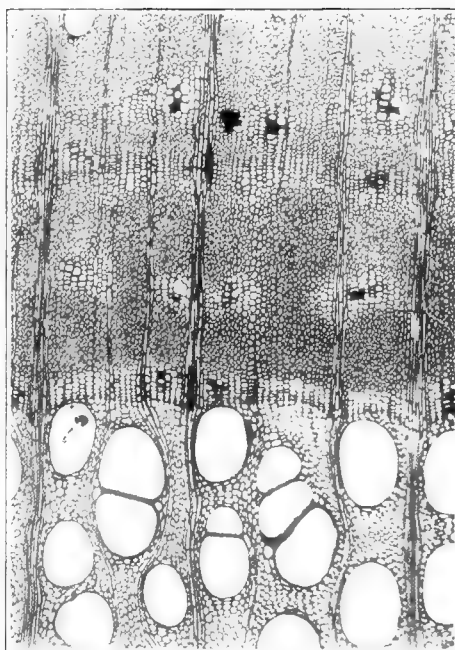
The spray used is the ordinary Bordeaux mixture, which is lime and copper-sulphate. The blight is due to a fungus which ramifies under the bark and girdles the tree. The spores of the fungus are carried by wind, on the wings and feet of birds, by insects, and doubtless in other ways. It is apparent, therefore, that the fungus will continue to spread as long as the spores are accessible to the agents which carry it, and as long as living chestnut trees are within reach. The proposed remedy aims to destroy the supply, to cure the trees already affected and by that means stop the spread to new grounds. The cure is accomplished by spraying contaminated trees, and by practicing tree surgery to the extent of removing diseased parts which act as centers for the spread of spores.

The Pennsylvania legislature appropriated \$275,000 to meet the expenses of the commission, and about \$250,000 of it has been expended in reaching the announced results. The experiments were made in Chester county, Pennsylvania, on trees from sixty-five to one hundred feet high, and it was found necessary to spray from the tops of other trees. The work began in the fall of 1911. Badly diseased branches were removed, and infections on trunks and limbs were removed whenever they were discovered. Mallets and gouges were used to cut away the diseased bark and wood, and the wounds were washed with bichloride of mercury to kill any spores or threads of fungus that might remain on the surface. The wounds were then covered with a weather-proofing consisting of pine tar, lampblack, and creosote, and occasionally rosin was added. Spraying began in April, 1912, and continued until November, the same trees being sprayed ten or fifteen times. It was claimed in December, 1912, that fully seventy per cent of the surgical operations had proved successful to the extent that no spores had spread from them; and the tops of the trees showed little or no signs of disease.

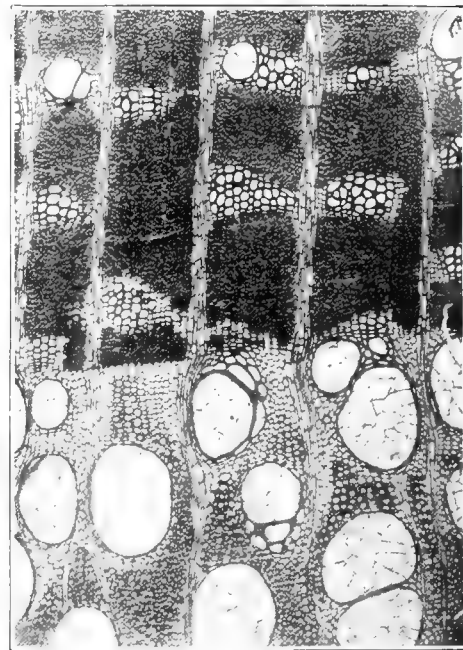
To that extent the remedy appears to have been successful. It is believed by the men in charge that several sprayings in the course of a season will be found necessary to render a tree immune from attack if diseased timber is in the vicinity. It is, of course, not practicable to do this under ordinary forest conditions, but if one step has been successfully taken, it should not be considered impossible to find means of going farther.



CROSS SECTION OF A PORTION OF TWO GROWTH RINGS OF KENTUCKY COFFEE TREE (*GYMNOCLADUS DIOICUS*); MAGNIFIED FIFTY DIAMETERS.



CROSS SECTION OF A PORTION OF TWO GROWTH RINGS OF HONEY LOCUST (*GLEDITSIA TRIACANTHOS*); MAGNIFIED FIFTY DIAMETERS.



CROSS SECTION OF A PORTION OF TWO GROWTH RINGS OF BLACK LOCUST (*ROBINIA PSEUDACACIA*); MAGNIFIED FIFTY DIAMETERS.

Some Woods of the Pea Family

One is not likely to think of such common plants as beans, peas and clovers being closely related to some of the hardest and heaviest woods in this country, but such is the case. The pea family is very large and widely distributed in all temperate and tropical regions. It contains such well-known trees and shrubs as locusts, acacias or "mimosa-trees," as well as some of the most important food and forage plants in the world. One important feature they have in common is a fruit pod with bean-like seeds. Of the 430 genera now recognized, seventeen have tree representatives in the United States.

The trees of this family supply heavy, hard, strong, durable woods. The average specific gravity of the dry woods of twenty species in this country is .78, which is equivalent to a weight of nearly 45½ pounds per cubic foot. This is heavier than good quality white oak. One wood, the palo verde, even when absolutely dry, will sink in water and four others will almost do so. If one wishes a timber that will resist decay for a long time he may choose at random any of this family, for the heartwood contains substances which repel the attacks of fungi and insects.

The woods of the pea family seldom preserve their identity in the market because the quantities are too small and uncertain. About the only exception is the black locust, of which over 5,600,000 feet, board measure, were reported sawed in 1910. The others, viz., honey locust, Kentucky coffee tree, mesquite, Jamaica dogwood, red bud, cat's claw, Texas ebony, horse-bean, palo verde, ironwood, indigo bush, yellow wood, saphora, frijolito, mimosa, and wild tamarind, all play a part, however slight, in supplying local demands for certain kinds of material.

Black or yellow locust (*Robinia pseudacacia*) is widely distributed throughout the eastern half of the United States. It was for a time planted extensively, but the damage from boring insects has restricted its use. In favorable situations it attains a maximum height of one hundred feet and a diameter of four feet, but usually it is only medium sized.

The sapwood is thin and light yellow in color; the heart varies from golden yellow to brown, often greenish, usually uniform in a single specimen. The wood is extremely hard, like horn, and very strong. It splits easily, works well and takes a beautiful polish; it is liable to check badly in seasoning.

Yellow specimens of black locust wood look enough like the wood

of Osage orange (*Toxylon pomiferum*) to belong to the same genus, though in reality they are not even of the same family. In color, density, strength, size and arrangement of wood elements and the presence of tyloses in the vessels, there is often little difference. The rays of Osage orange are a little finer, the luster is somewhat higher, and there are narrow red stripes running through the wood. The color of the golden-yellow wood of locust is readily soluble in water and the wet wood gives off a stain when applied to white paper or cloth, thereby differing from Osage orange. The wood of locust also has a taste reminding one of uncooked beans, which is characteristic.

Black locust wood is seldom cut into boards and planks, at least not to remain in that form. Its principal use is for insulator pins on telegraph and telephone lines. Maryland reports an annual consumption of 900,000 feet and North Carolina, 2,600,000 feet of locust in this industry. In 1909 nearly eighteen and a half million insulator pins were purchased and of this number over thirteen million were of black locust. It requires a very strong wood and one that will resist decay, properties in which the black locust excels. California reports the use of 45,000 feet, board measure, for tree nails, and Kentucky 6,000 feet for hubs. Its great durability makes it well suited for fence posts, poles and railway ties. In 1909, 58,000 feet log scale of locust was made in Missouri into one-quarter-inch rotary cut veneer. It is also employed to more or less extent for furniture, cabinet work, interior finish, turnery, handles, fancy articles, hub stock for carriages, policemen's clubs and fuel. Were it not for the danger from borers, its rapid growth, even on poor, sandy soils, would make it exceptionally valuable for commercial plantations.

Kentucky coffee tree (*Gymnocladus dioicus*) derived its common name from the fact that the seeds were formerly dried and used as a local substitute for coffee. It occurs sparingly on rich bottom lands in the central hardwood region, attaining a maximum height of one hundred and twenty feet and a diameter of four feet. It has leaves from one to three feet long and eighteen to twenty-four inches wide, divided and sub-divided several times, so that when they fall it appears as if the branches were dropping.

The thin sapwood is greenish; the heart is light cherry red to reddish brown. The wood is hard and strong, durable, very coarse-textured, usually straight-grained, splits readily, works well, takes a

high polish and is a handsome though coarse wood. It is used locally for posts, ties, bridge timbers, sills, interior finish, cabinet work and fuel. There are a great many purposes to which it is suited, but the scarcity of the timber limits its importance. The tree is quite common in some parts of Tennessee, where it is cut and sold as butternut.

The honey locust or thorn tree (*Gleditsia triacanthos*) attains its largest size in the valleys of small streams in southern Indiana and Illinois. It has been known to reach a height of one hundred and forty feet and a diameter of six feet, but more commonly is about seventy-five feet high with a broad, open, rather flat-topped head of slender, somewhat drooping branches. The sapwood is a pale yellow; heart, bright reddish brown. The wood is rather coarse-textured, hard, strong but somewhat brittle, fairly durable, works moderately well and takes a beautiful high polish. It is often confused with the Kentucky coffee tree, but the differences in texture, the size of the rays and the arrangement of pores in the outer part of the growth rings are sufficient to permit ready separation of the two.

The principal use is for fuel, fence posts and poles. It is employed occasionally for hub stock for wheels and in heavy construction. Some of it is made into furniture and when quarter-sawn the rays show to advantage. It makes attractive stair balusters and posts, and picture molding.

The mesquites form a group of small or medium-sized trees and shrubs in the arid Southwest. The most important is *Prosopis juliflora* and its two varieties. It thrives best along the richer valleys and follows the beds of small streams for long distances up into the mountains. It will send its roots to great depths in search of water and not infrequently the root development seems out of all proportion to the part above ground, giving the name "underground forests." The tree is small, often shrubby, but in good situations reaches a height of forty feet and a diameter of twenty inches.

A remarkable fact concerning the root wood is that it is heavier than wood from the trunk. The wood of the stem varies in color from a dark or reddish brown heart to a clear yellow in the thin sapwood. It is hard, heavy, dense, extremely durable in contact with the soil, but not very strong or elastic. It takes a beautiful polish and then somewhat resembles black walnut. The wood of both stem and roots contains over five and a half per cent of tannin. The black gum which exudes from cuts in the tree trunks and is apparently composed of dried sap contains over twenty per cent of tannin.

Mesquite is the most important tree in the Southwest. In many parts of New Mexico and Arizona it forms the chief, often the only fuel. The big roots are often dug up for this purpose. The tree does not reach proper dimensions for lumber, but makes good fence posts, railway ties, house blocks and paving material. It makes a high-grade furniture material, but is difficult to work because of its hardness. Large, heavy tables, deeply carved, are sold in some of the cities, but the work is done by hand, not in the regular furniture factories. Rollers for moving houses in the Southwest are preferably of mesquite because of its lasting qualities. Some is employed in making wagon felloes for use in hot, dry regions, but the wood is too brittle to withstand heavy shocks. It is adapted for turnery in the manufacture of gavels, goblets, trays and many kinds of novelties. An excellent, compact charcoal is obtained from it.

A report on the wood-using industries of Texas contains this paragraph in reference to the by-products of mesquite: "The pods are food for farm stock. Before the first railroad reached San Antonio mesquite pods were a regular market commodity. The Mexicans know how to make bread and brew beer from the fruit; tan leather with the resin; dye leather, cloth and crockery with the tree's sap; make ropes and baskets of the bark. Parched pods are a substitute for coffee; bees store honey from the bloom which remains two months on the trees; riled water is purified with a decoction of mesquite chips; vinegar is made from the fermented juice of the legumes; tomares of mesquite bean meal, pepper, chicken and cornshucks; mucilage from the gum; and gum drops from the drieds sap."

It is interesting to note that mesquite was introduced into the Hawaiian Islands in 1837 and has now spread so as to cover between 50,000 and 60,000 acres in the leeward districts of the larger islands. The tree is known there only as algaroba. The algaroba forest is

the largest single source of fuel supply in the territory. It is estimated that over 3,000 cords are sold annually in Honolulu at a price varying from \$12 to \$14, delivered. The algaroba forests are further of value because the pods make good stock food and also because the tree is one of the important plants locally for bee pasturage. It was estimated that for the year 1907 the total amount invested in apiaries and other equipment for the manufacture of algaroba honey was \$125,000 and that the gross receipts for algaroba honey products for the year were over \$25,000.

Jamaica dogwood (*Icthyomethia piscipula*) is one of the commonest of the tropical trees of Florida. It attains a height of from forty to fifty feet and a diameter of from two to three feet. The wood is very heavy, hard, close-grained, very durable. The clear yellow-brown color makes it a handsome cabinet wood. Its principal uses at present are fuel, charcoal and boat building.

Cat's claw or devil's claw (*Acacia greggii*) is a much-branched, short-trunked tree, sometimes from ten to twenty feet high and six to twelve inches in diameter, growing in western Texas, southern New Mexico and southern California. It receives its name from the keen, hooked spines on its twigs. The wood is very hard and heavy, variable in color, sometimes grayish green, or dark red clouded with streaks and patches of other shades and tints. The wood is inclined to be contorted due to the presence of pits and cavities which slowly close as the tree grows older. It makes a handsome cabinet wood and is employed in small pieces of furniture, novelties and ornaments. It is also made into grills, tool handles and small turned ware. A resinous gum, resembling gum-arabic, is yielded by this species and the wood is so saturated that it feels greasy to the touch.

Texas ebony (*Zygia flexicaulis*) is one of three species, and grows in parts of Texas. The wood of the root is nearly black and is used to imitate the ebony of commerce. Stem wood, which is exceedingly heavy, is of a dark color, rich brown slightly tinged with purple. It is used in turnery for fancy articles, but principally for fence posts, fuel and crossties. It is also employed in cabinet making.

Horse-bean (*Parkinsonia aculeata*) is another small shrubby tree of Texas, Arizona and California. The wood is dense, hard and moderately heavy, and is occasionally employed in making small articles such as paper knives, rulers, paper weights and various novelties.

Palo verde (*Cercidium torreyanum*) is a much-branched, leafless, short-trunked, thorny tree from fifteen to twenty-five feet high and ten to fifteen inches in diameter, growing in the deserts of southern California. The wood is very hard and heavy, like horn. It has a few uses other than for fuel and the pungent fumes reduce its suitability for this purpose.

Ironwood (*Olneya tesota*) is a short, thick-trunked, bushy tree growing singly or in open patches in the hot desert regions of southern California and southwest Arizona. Perfectly dry wood of this species is heavier than water. The color is a deep chocolate brown, mottled with red; sapwood thin, lemon-colored. The wood is exceedingly hard to split or work and is used only locally for fuel and minor purposes.

Wild tamarind (*Hysiloma latisilqua*) is a tree from forty to fifty feet high and two to three feet in diameter, in southern Florida. The color of the heart is like mahogany; sapwood thin, nearly white. The wood is used and valued locally in boat and shipbuilding.

Yellow wood (*Cladastris lutea*) is a rare and local tree of medium to large size and usually divided near the ground into two or three stems. It is found in Tennessee and occasionally in neighboring regions. The color of the heart is a bright, clear yellow, changing to light brown on exposure; of the sapwood nearly white. The wood is heavy, very hard, strong, close grained and with a smooth, satiny surface. Its use is limited only because of its scarcity. It has been employed occasionally for gun stocks, more often for fuel. It yields a clear yellow dye.

Mimosa (*Leucæna pulverulenta*) is a medium-sized tree with rather straight trunk eighteen or twenty inches in diameter, growing in Texas near the mouth of the Rio Grande. The wood is very hard and heavy. The heartwood is a rich, dark brown, resembling mesquite, thin sapwood, yellow. It is used in grill work, small pieces of furniture, tool handles, jewel boxes, and various novelties.



Tanners' Demands on the Forest



The art of the tanner is one of the most ancient and honorable in the catalogue. Probably converting hides into leather was one of the earliest of stated occupations; and the wonderful chemical changes which go on in the conversion have been the subject of study and experiment by the industrial chemist for many years.

The use of the bark of the chestnut oak in the manufacture of liquors used for tanning has been of long duration, and "oak leather" is a standard product and a staple commodity. Hemlock, on account of its proximity to many of the western tanneries, as well as the great available supply, is also being used, but is not generally considered nearly so good as oak.

It is worth noting, however, that the advancing cost of chestnut oak bark, as well as the increasing difficulty of getting it out, has gradually cut down the consumption by the tanners, while the use of extracts imported into this country by large concerns which operate in several remote quarters of the globe is constantly on the increase. Though the tanner prefers to use the good old reliable oak bark, which he can keep an eye on and leech according to his own ideas, still the force of necessity is compelling him to rely more and more on the importer and his extracts. The latter are not more costly than the liquors taken from the bark of the domestic oak, but for reasons of quality the leather manufacturer does not care to use any more of them than he has to.

To indicate the extent of the consumption, a visitor at one of the principal Ohio valley tanneries was surprised to notice several large tank cars standing on the siding. These had just been emptied of their contents of extract, which had been pumped into large tanks erected for the purpose. The tanner explained that they had to buy carloads frequently, contracting for their requirements for a year at a time and specifying deliveries as needed. Many of the tanners use scores of tanks of this material annually, and the business consequently amounts to a great deal.

In this connection, as a pointer to the stave men and others interested in the package business, it should be stated that the tank car has just about put the good old-fashioned barrel out of business, as far as the handling of extracts is concerned. The tanners used to buy their supplies of liquors in barrels, and those who have no sidings still do; but owing to the difficulty of keeping the barrels in good condition for return purposes, after they were emptied, and the comparatively low price paid on their return, most of the leather people have about come to the conclusion that it is more economical to use tanks.

Besides, they point to the labor that is saved by using the pump in transferring their liquors from the tank to the mixing vats, whereas with the barrel in use this was a more or less cumbersome and inconvenient process. From what could be gathered in a few conversations on the subject, the barrel men have about lost out with the tannery trade.

However, this may be offset by the fact that the importers of tannery extracts doubtless are compelled to ship their product in barrels from the point of manufacture to this country, and so are confronted with the necessity of using barrels for the first lap of the journey, even though the final shipment may be in tanks. Hence, the stave men and the shook manufacturer may get the business after all, even though the tanner doesn't buy his extracts in barrels at present.

The increase in the use of extracts, as noted, has been very much in evidence, but it is likely that while the cost of the bark may have had something to do with it, the difficulty of getting it at certain periods, when work in the woods is out of the question, is one of the biggest reasons in favor of buying more or less satisfactory substitutes. It is for this reason that the tanners are compelled to carry large stocks of bark in their sheds so as to enable them to tide over any periods when the country bark producers will not be able to supply them.

The chestnut bark production is chiefly in connection with tie

manufacture, little of it being handled at the sawmills, for the obvious reason that comparatively little chestnut oak is cut into boards. Its poor appearance and generally low-grade condition operate against its use for lumber, but it makes an excellent tie material, although unusually heavy and inclined to check. The tie men themselves do not as a rule look after the chestnut oak bark; but ordinarily arrange with the dealers in the commodity to strip the logs of the bark, which enables the tie manufacturers to handle the timber more conveniently. Consequently they charge comparatively little for this "bark privilege," as it might be called, and thus the dealers have an opportunity to get a pretty good profit out of it.

This is indicated by the fact that tanners at the Ohio river are paying \$12 a cord for bark, delivered; and as the rate on this material averages about 12 cents, making a freight charge of \$2.69 a cord, the \$12 charge produces a net price of \$9.31, which is pretty good, considering the price at which low-grade lumber is being sold. However, stave men and lumber manufacturers have never been interested in developing this end of the business, for the reason that chestnut oak itself is not highly regarded in either branch of the business.

The movement of the mark is usually not handled on a very up-to-date basis. As the material is produced in comparatively small quantities, it is hauled to the nearest railroad station and allowed to accumulate until sufficient tonnage has been secured to make up a carload. This is then shipped, but meanwhile the bark has been more or less exposed and has lost considerable of its "flavor."

A more scientific method has been adopted by a concern in eastern Tennessee, which set up a plant for the extraction of the tannic acid from chestnut oak bark, as well as from chestnut wood and other timber containing a fair amount of the desired chemical. In this way the manufacturer is able to ship the product at small cost, compared with the freight on the bark itself, and apparently should be able to develop a profitable business without much trouble.

The tanners themselves are old-fashioned and conservative, however, and most of them prefer to buy the bark, pile it until needed, grind it, convey it to their leech-houses, prepare the liquors, withdraw the spent bark, pump the liquors to the tanks to await use and go to all the other trouble and expense necessary, rather than get the oak extract in its final form and devoid of the inconvenience attached to the method usually employed.

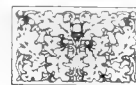
But as one tanner put it, "Just as a coffee drinker would rather have his brew made from the freshly ground beans, so we want to get the fresh liquors from the bark. When the extract is made, the very last bit of the tannic acid is boiled out of it, and the results are not unlike those experienced by the coffee drinker who finds that the new cook has allowed the coffee to boil and boil and boil until it tastes like day before yesterday's dish water. The extractors, of course, endeavor to clarify the product as much as possible, and give us the best liquors they can produce; but at the same time we feel that quality leather can be produced more certainly when the tanner has full charge of the preparation of the bark."

It is interesting to learn that the tanners, instead of burning the spent bark, as formerly, are now getting value out of it by selling it to manufacturers of white lead. The latter employ it, it is said, in finishing their product, burning the bark with it as a means of carbonizing or corroding it. This prevents it from deteriorating through oxidation, as it would do if it were put out in a pure chemical condition.

A novel feature in toothpicks is now being advertised by a Boston concern. High-grade paper birch toothpicks are soaked in a decoction of cinnamon bark until they acquire an agreeable flavor and scent. A box of three hundred sells for fifteen cents.



Northern Poplar for Paper Pulp



The demands for raw material to supply the wood pulp industry have recently increased in leaps and bounds. In 1900 there were some odd 2,000,000 cords used; in 1911 there were over 4,328,000 cords used; thus increasing over 100 per cent in a decade. Spruce used to be practically the only wood used for paper pulp. Now it supplies only about fifty-eight per cent of the total amount, and a large portion of our spruce is imported from Canada. Besides spruce a large amount of hemlock, balsam fir and a great variety of hardwoods are coming into common use to supply the increasing demands not only for the newspaper trade but also for nearly every other form in which paper is used.

Among the most common hardwoods being used are beech, maple, birch, cottonwood and poplar. During the calendar year 1911, 368,000 cords of poplar were used as against 300,000 cords in 1908. It now furnishes about nine per cent of the total supply. Poplar is the usual term applied to two common species found in the North woods, the quaking aspen and the big tooth aspen or poplar. They are botanically closely associated. The former is the *populus tremuloides* and the latter the *populus grandidentata*. They are the common trees that spring up after the land is cut over and then burned over throughout the northern New England section, the Adirondacks, the lumber region of the lake states and throughout southern Canada.

Until a few years ago, little attention was paid to this growth, it being regarded as practically worthless and even injurious to a growth of the more valuable trees that might be restocking these cut-over areas. But with the rapid disappearance of our spruce timber and in looking about for some successful substitute it was found that the fibers of these poplars adapted themselves

admirably for use both with the mechanical and chemical process of pulp manufacture. The largest part of it, however, is reduced by the soda process. The qualities that make these poplars valuable in this industry are the comparatively light, even and soft fibered woods. The tissues are straight grained and free from resins, tannins, gums and other undesirable elements. The bark is also very thin and is easily rossed off by the barking machines. The wood of the large tooth aspen is somewhat heavier and harder (specific gravity .46) than that of the quaking aspen (specific gravity .40). They have found but little demand for use in other industries on account of the weak character of the wood as well as their poor durable qualities. However, both, and especially the large tooth aspen, have been considerably used in the excelsior industry and to some extent for box boards, woodenware and toys.

For paper pulp the average price paid at the mills for the poplars is about \$8.00 per full cord (a stack 4'x4'x8' long), and the price is steadily advancing as the supply of spruce diminishes. Spruce brings an average of about \$10.00 a cord now and some mills are forced to pay as high as \$16.00 per cord delivered. There are thousands of acres of burned over land in the Adirondacks, northern

Maine, New Hampshire, Michigan, Wisconsin, and Minnesota that are yielding good stands containing from ten to forty cords of poplar pulpwood per acre. A number of companies have been quietly buying up several large tracts of these old lumbered areas at attractive prices with the intention of cutting the poplar for cordwood.

Both species grow with remarkable ease and rapidity and several areas in the Adirondacks have been cut over at least two or three times for pulpwood. The big tooth aspen grows to larger size than the other and frequently attains a diameter of from ten to fifteen inches in from fifteen to twenty years. Both trees are comparatively short lived and decay sets in rapidly after attaining a certain age. The accompanying picture shows a splendid stand of poplar, both of large individual size of trees and of great extent over a considerable area. The trees stand fairly close together, trim themselves readily of the lower limbs and grow tall and straight.

These poplars should not be confused with the yellow poplar, the Carolina poplar or cottonwood which is a common tree in our eastern hardwood forests. This tree is also a very rapid grower and has been recently urged as a splendid tree to plant for pulp purposes

in various lumber and forestry circles. It has been widely planted for decorative purposes and has been successfully used in producing a paper of very high order.

On several hardwood operations, both the poplar and the cottonwood are being cut into cordwood lengths and shipped to pulp mills since they often command a better price when utilized in this form than in any other.

Those who reduce cordwood to board measure generally figure that a cord is equivalent to six hundred board feet, but that factor is not in

universal use. The accuracy depends largely upon the size and form of the sticks, the more open the ricks the less the actual quantity of wood present.

Over forty years ago an eastern railroad purchased one hundred lignum-vitæ ties at a cost of four dollars apiece. Of the original number forty are still in service and have outworn three sets of rails. The other sixty were removed because they were "spiked to death" and not from decay.

* * *

Libraries, locker-rooms and shower-baths are found in some big flooring plants, indicating that the owners of these establishments believe that aiding their men to keep clean, and to improve their minds with the right kind of reading, is not only humanitarian work, but a positive asset of the institution. It is easy to believe that the man who is employed in a flooring factory which takes account of his value as a man as well as a machine hand, is going to develop an intense degree of loyalty; and loyalty is a mighty asset in the battle for business, as well as in military operations.



A TYPICAL STAND OF NORTHERN POPLAR GROWING ON AN OLD BURNED TIMBER TRACT NEAR INTERNATIONAL FALLS IN NORTHERN MINNESOTA. THIS IS COMING INTO STRONG DEMAND FOR PULPWOOD



Wood the Underwriter's Scapegoat



George H. Holt of Chicago summarized the attitude of the fire underwriters very pithily some time ago when he said that reference to the use of wood in building construction was invariably met with the cry of "Fire!" There is no doubt that the consumption of lumber in buildings, especially those of great cost and pretensions, has been reduced because of the impression which has been created that wood is not only undesirable but positively hazardous.

In a recent issue *HARDWOOD RECORD* commented editorially on an article appearing in *Collier's Weekly* analyzing the causes resulting in an appalling annual fire loss. This article has been followed by a number of others dealing with the same problem. The series is called "The Business of Arson," and is the work of Arthur E. McFarlane. *Collier's Weekly* has a leaning toward the sensational, and is sometimes inclined to exaggerate; but it can be said for the benefit of those who have not read the stories that Mr. McFarlane has demonstrated that he possesses an intimate knowledge of the fire insurance business, and is writing facts. The fire insurance men may not agree with his conclusions, but they must of necessity acknowledge the truth of his statements.

In the very beginning of the series, we find these significant remarks:

"The authorities and the public alike have been going by a set of predigested theories, picturesque and plausible, no doubt, but put forward to hide the facts. We have been telling ourselves that our tremendous, ever-increasing fire loss is due to bad building construction; to carelessness, negligence and bad housekeeping; to our 'unparalleled industrial activity'; to our 'climate.' Let us take the first and most common objection—bad construction. Our standards in that respect are in the main indefensible. Once the fire starts, it is bad construction that burns an entire city. We are not concerned with that point, however, but solely with the question how the fire starts. Now wood is, by common consent, the most inflammable of building materials. Norway, Sweden, and South Germany are all wood builders, yet our ratio of loss averages from eight to thirteen times greater than theirs. This, too, in spite of the fact that their fire departments, compared to ours, are material for vaudeville. Again, New York and Chicago and Boston, even small cities like Flagstaff, Ariz., now have their 'fire limits'—great central areas where frame construction is no longer permitted, and in which for twenty years joisted brick has steadily given way to steel, concrete and hollow tile. Has this made itself felt? It is in the modern fireproof mercantile buildings of America—buildings unequaled in Europe—that our big cities' heaviest fire losses now occur!"

Isn't that a splendid commentary on the situation? Wood has been ruled out of building construction as far as possible to make room for so-called fireproof materials, and instead of the loss ratio falling, it actually increases! The reason given by *Collier's* writer is that arson is responsible: organized, widespread, systematic burning of property for money, resulting in fifty per cent or more of the payments made by the insurance companies being on criminal fires. Europe can use wood and have a mere fraction of our fire losses; but Europe has no arson trust. Instead of driving the incendiaries out of business and putting a few score of them in the penitentiary, America has chosen thus far to confine her efforts to improving the physical condition of buildings, centering her heaviest attack on the use of wood.

The logic of the situation is all with the magazine writer, who has analyzed the situation in great detail, and has shown how a period of numerous commercial failures is always preceded or accompanied by many fires; how changes of fashions result in the destruction by fire of goods which have gone out of style and consequently become worthless, except to the insurance companies, which are always ready to pay exorbitant prices for junk of this kind; how the evil of overinsurance, fostered by the flat

commission system, has been developed by greedy brokers and agents until every possible inducement is held out to the business man in straits to burn his own property, and every opportunity is offered the crook to go into a fake business and clean up a tidy profit by an annual fire.

Fire insurance men, in private, are constantly speaking of the moral hazard, and constantly protesting against the payment of losses on fires which they are certain are crooked, but which cannot be shown to be so. And yet they meet the situation publicly by appealing for better construction, ordinances limiting the use of wood, improvements in the fire department and water-works system. It is as though a patient suffering from appendicitis and needing the heroic remedy of the knife were to be approached with a face lotion. The application is to the wrong spot. It can't get results, because the essential factor has been disregarded.

There is no telling what effect the *Collier's* series will have on the insurance situation. Fire underwriters may insist that while arson is a large item in the fire bill paid by Americans, loosening the regulations concerning construction and letting down the bars to the lumbermen for the use of their products would not help the situation. With some show of reason they might say that present efforts should be extended, and not discontinued.

But the lack of logic in their position is that "faulty construction," which has been made a synonymous term with "wooden construction," has been alluded to as the chief cause of our excessive fire losses. Now that it has been practically demonstrated that this is not so, there is no longer any good reason for discriminating against the third most important industry in the country in the regulations pertaining to building. As a necessary precaution, required in order to protect the community, the rigorous laws affecting the consumption of forest products in building might have been justified; but inasmuch as it has been shown that this alleged necessity does not exist, and that the real cause of the immense fire waste of the United States is due not so much to poor construction as to arson, the justification for making lumber the scapegoat of the entire situation disappears.

Probably it will be difficult, if not impossible, to extend the use of lumber much further in the general construction of large buildings. Reinforced concrete and steel are of course needed in the structural work. But in the interior finish, including the windows, doors, panels, moldings, floors, etc., and in the furniture used in these buildings, wood should predominate, considering every factor from beauty and utility to durability and cost. Lumbermen ought to study the facts in this connection and prepare themselves to oppose any statements of the wild-eyed variety regarding the dire effects of putting wood into a building. A little educational work along this line, undertaken by everybody interested, would go a long way toward eliminating the somewhat unfavorable sentiment that is found in many quarters. Of course the *Collier's* series is helping in that direction, and it should be followed up by those directly interested.

The extreme position taken by fire insurance authorities in the United States, along with the manufacturers of substitute building materials, to the effect that not a stick of lumber as big as a match ought to be used in a city building, is in sharp contrast with the sane and efficient regulations of European countries. They realize that for many purposes wood is better, as well as cheaper, than other materials; that its production and manufacture constitute an important industry, which should be encouraged as much as possible consistent with the general good; that fires can be prevented to best advantage by rooting out incendiaries, investigating all fires and publishing the criminally negligent as well as the incendiary himself; and consequently they are holding their losses down, by the use of common every-day horse sense, instead of radical and extreme measures at one end and none at all at the other.

It isn't often that a magazine gives the public illumination on the why's and wherefore's of the orthodox tenets of a big business affecting the public in a thousand ways, like fire insurance; and when a publication like Collier's really exposes the facts and demonstrates that lumber has been used as a target and

a blind to distract attention from more important factors, it earns the thanks of the entire community. Lumbermen at least ought to feel much indebted to Mr. Collier and Mr. McFarlane, and see to it that the public at large is given the essential points of the story of "The Business of Arson."



Hardwood Used in Logging Conifers



Although four-fifths of the standing timber in the United States is coniferous, nevertheless the hardwoods occupy a place which conifers cannot fill. The woods of the pines, the spruces and the firs, for example, are of simple structure, comparatively easy to work and to season, and well suited for construction purposes generally. They are, however, lacking in combined hardness, strength and toughness which make such species as the oak and hickory so valuable. The growth of hardwoods is usually slower and their soil requirements more exacting than those of the conifers, but there are many uses of timber for which only the hardwoods are suited and no solution of the future timber supply can be reached which does not take them into full consideration.

The logger in coniferous forests is daily acknowledging a debt to hardwoods in the many uses he makes of them. Take, for instance, the question of tools and equipment. An indispensable tool is the ax, and a most essential feature is that it should have a good handle. The choice wood for this purpose is second-growth hickory, though sugar maple, hornbeam and occasionally other woods are employed when hickory is not readily obtainable. The handles for single-bitted axes are either curved or straight, being largely a matter of individual preference. In the eastern part of the country loggers prefer a thirty-six-inch handle, while on the Pacific coast, where large timber is handled, the lengths vary from thirty-eight or forty inches for the average-sized timber to forty-four inches for redwoods. Handles for double-bitted axes are necessarily straight in order that either bit may be used, and are made in the same lengths as those for single-bitted axes. Handles for broadaxes are from twenty-six to thirty-six inches long and have a slight upward curve immediately behind the eye of the ax to enable the workman to assume a more upright position and still retain a correct cutting angle for the blade. The handle for a turpentine ax is straight and usually thirty-six inches in length.

The handles on cross-cut saws are made of sugar maple, beech or other good quality hardwood. They are always round, about 1½ inches in diameter and from twelve to eighteen inches long. Handsaw handles are mostly of beech, except for the highest priced, which are of apple wood.

An essential part of every feller's and log-maker's equipment is the wedge which is used to assist in directing the fall of trees and to prevent the saw pinching in the cut. They are made of hardwood or of metal. In the former case they are of hickory, sugar maple, beech, hornbeam, dogwood and persimmon, depending upon which kind is accessible. They have the advantages over metal wedges of being inexpensive and holding better. They are made by the sawyers as needed or by contract at about two cents each. They are ordinarily from six to eight inches long, 2½ to 3½ inches wide and about one inch thick at the head. From thirty to forty of these wedges are used up by a saw crew every month. A very large wedge, commonly known as a "glut," is often used in splitting posts and rails, being driven in after the cleft is started with an iron wedge.

Iron wedges are generally driven by means of a wooden maul made by the camp blacksmith from sugar maple, yellow birch, hornbeam or other hard and tough wood. A common form used in Maine is made from a round tree section, six inches in diameter and from twenty-six to thirty inches long. A head eight inches long is left on one end of the section and the remainder is trimmed down to a diameter of two inches to form a handle. Sometimes

the head is bound with iron hoops to prevent splitting. Mauls are also made from large oak burrs which are hewed out and fitted with a handle through the center. Such a maul can be made very heavy for splitting bolts, rails, posts and firewood and will last a long time.

The peavy is an indispensable part of the logger's equipment. The standard handle is 5, 5½ or 6 feet long, but may be made in special lengths as desired. The original handles of hickory or ash are often replaced by the camp blacksmith with maple, hornbeam, white oak or such suitable wood as is at hand. Handspikes are wooden levers from five to seven feet long. Only hardwoods such as hickory, oak, sugar maple, black birch, hornbeam and a few others have the required strength for this purpose.

Laborers engaged in bringing cross-ties, stave bolts and other timber down steep slopes often use a tool known as a "pick-a-roon." On a hickory, ash or oak handle is attached a head with a recurved pike for sticking into the bolt or tie to drag it. Frequently pick-a-roons are made from worn-out axes by removing a portion of the cutting edge. There are various other logging tools which require hardwood handles, a common example being the pike pole. The scale stick for determining the contents of logs is almost invariably of hickory, for few other species possess its suppleness and wear-resisting properties.

In the transportation of logs and lumber hardwoods play an important part not only in the regular wagons, trucks and sleds but also in various contrivances of local manufacture. A crude form of sled sometimes used in the pine forests of the South when the ground is too soft for wheels is called a "lizard." It is made from the natural fork of an oak or other hardwood of the requisite shape and strength, hewed flat on the upper and lower sides and with an upward sweep on the forward end so that it can readily slide over obstructions when in use. Across the two prongs is bolted a bunk for the log to rest on. The log is held in place by a chain which is finally passed through the upturned nose of the lizard. With this contrivance logs can be snaked out without difficulty unless the bottom is extremely soft and miry.

A higher type of sled used for the same purpose is known as a "go-devil." In this case two unshod hardwood runners, often yellow birch, are selected from timbers having natural crooks. The usual type is from 6 to 7½ feet long, 6 inches wide and from 3 to 5 inches thick. About 2 feet or so from the rear end of the runners is bolted a bunk, 6x6 inches square and from 4 to 5 feet long, bearing at the center a ring used in binding on the logs. The curved forward ends of the runners are connected by a roller. The sled is drawn by means of chains fastened to either side of the bunk or to the runners, and since it has no tongue a go-devil can be turned around within a narrow compass. Sometimes two go-devils are fastened together into a "jumbo" for hauling on snow for distances less than a half mile.

In the Northeast go-devils are replaced in some cases by yarding sleds or drays. A yarding sled is made by the camp blacksmith and consists of a pair of yellow birch or maple runners, 7 feet long, 3 inches wide, and shod with ½-inch steel. The runners are held together by a bunk 8 inches square and 4 or 5 feet long, placed about 3 feet from the rear ends. In order to facilitate handling the sled in the woods the bunk is made in two parts—a lower stationary bar firmly bolted and braced to the runners, and an upper piece which is temporarily removed when the sled is

turned around in the woods. The upper bunk has grooves in the ends or sides above the runner and these fit around pins, called "starts," which are fastened in the lower bunk. Five large logs or seven or eight small ones with one end supported on the bunk, the other dragging on the ground, can be hauled at a time.

There are various other kinds of sleds in use, depending upon the length of haul, kind of road, section of the country, etc. In the Lake States and Adirondacks, where yarding sleds are not used, a "bob" performs similar work. In some places logs are transported considerable distances on heavy sleds variously known as "two-sleds," "twin sleds" and "wagon-sleds." They are made from well-seasoned oak, maple or birch. The woodwork lasts from three to four seasons, but the runner shoes must be removed every year. The cost of making a two-sled in a camp blacksmith shop, including labor and materials, is between \$50 and \$75. Dealers in logging supplies quote them at prices ranging from \$100 to \$150 each.

A low truck, called a "bummer" or self-loading skidder, has come into extensive use in the flat and rolling hardwood and yellow pine forests of the South, particularly in Arkansas and Louisiana. While those for sale by manufacturers have skeleton wheels 24 inches in diameter, with a 6-inch tire, many operators prefer to make their own out of black gum. In the latter case the wheels are solid, with a 14-inch face and a diameter varying from 18 to 21 inches, and possess the advantage of a greater bearing surface on soft ground. Heavy steel axles support a wooden bunk 2½ to 3½ feet long and slightly concave on its upper surface. A tongue 5½ feet in length is attached to the bunk and serves not only as a tongue but also as a loading lever. Small logs are held

on the bunk with chains and large ones with tongs. A log is loaded by placing the bumper, tongue up, alongside and 3 or 4 feet from one end, attaching the tongs and then pulling the tongue down into a horizontal position. This places the log on the wheels and by squaring the truck around it drops on the bunk and is ready to start for the skidway. Bumpers can be built by the camp blacksmith for from \$12 to \$15 each, while the dealer's price is about \$40.

In railroad logging stringer roads are sometimes built if suitable hardwoods are available for the rails. Crossties from 8 to 12 inches in diameter and 7 feet long are cut along the track and spaced from 18 to 24 inches on main lines and from 24 to 30 inches on spurs. On these are placed 6x6-inch wooden rails made up of two sawed pieces, 3x6 inches, one placed on top of the other and fastened together and to the ties by heavy wire spikes. The top rail is made of beech, birch or sugar maple and is sometimes covered with strap iron. For the lower rail any strong wood of little value, such as wormy oak, will do. The cost of maintenance of a stringer road is heavy as the rails sliver badly and break, requiring so much repairing after the first six months that the road is practically rebuilt in a couple of years. The cost of building stringer roads is from \$800 to \$1,200 a mile, exclusive of material, though this may be greatly increased where numerous bridges are necessary.

These instances not only show a number of convenient uses of hardwoods in logging operations, but also indicate the great saving in the cost of equipment which may be effected through the ingenuity and skill of a good camp blacksmith, and a little forethought in planning equipment.



Facts About Some Precious Woods



COCOBOLO

The best known grade of cocobolo grows in Central America and is shipped from Panama. This is a slow-growing, very hard, bright red wood, one of the brightest woods of commerce. The sapwood is yellow and quite heavy, an average sized log having about two inches. After being cut in the forests, the logs are chopped into short lengths, usually not over three or four feet, presumably to facilitate handling, as the wood will sink in water, making it impossible to float the logs down the rivers to the seaport. Many of the pieces become split and wormy, and a lot of this wood on being received is made up of billets of all shapes, weighing from thirty to four hundred pounds each.

EBONY

Ebony is well known as a precious wood. It is one of the hardest woods in existence and very heavy, sinking quickly in water; but unlike cocobolo, which has large pores and is of a tough, fibrous nature, ebony has very dense, close pores, and is of a brittle hardness, and consequently takes a high polish.

The best grade, known as Madagascar ebony, is jet black, and comes from the west coast of Madagascar. The end of a freshly cut log makes a striking appearance, as the sapwood is white and sharply defined against the jet black heartwood. This sapwood is nearly all adzed off before the wood is shipped, giving the logs somewhat the appearance of charred pieces. As the wood is received, the logs are from four to ten inches in diameter, by from four to eight feet long, and weigh from fifty to one hundred and forty pounds each. As the hearts of the logs are generally defective, much waste results in manufacturing.

The other most important classes of ebony are Tamatave and Gaboon ebony. Tamatave ebony grows on the east coast of Madagascar and is purplish-black in color. In size it is somewhat larger than Madagascar ebony, the logs averaging from 200 to 250 pounds each.

The source of Gaboon ebony is the northwest coast, or tropical part of Africa. This wood is grayish-black, with occasional light-

colored streaks running through it. The logs are prepared for market by being cut into sections, thus excluding the heart, which is of no use. All sap is removed, and the wood is received in the shape of billets of from thirty to one hundred pounds in weight. All ebony is very slow-growing, a tree giving an average sized log being one hundred years or over in age.

LIGNUM-VITAE

Lignum-vitæ is generally considered to be the hardest wood in existence. The main sources of supply are Hayti, Mexico and Cuba. The color varies from dark brown to a dark greenish-brown. The wood from Hayti is the poorest quality, and nearly all of the supply is used for casters for furniture. An average sized log is eight inches in diameter by three feet long, this including from one to two inches of sapwood. Mexican lignum-vitæ is next in quality, being generally sounder and larger, but logs have a heavy sap, which is light yellow in color, and cannot generally be used, as it is softer than the heartwood. The lignum-vitæ grown in Cuba is very much superior to either of the other named grades, both in quality and size. Logs run from six inches to thirty inches in diameter by from four to ten feet long, an average log being twelve inches in diameter. This wood is greenish in color, and has a very thin sap. The logs measuring from eight inches to twelve inches in diameter inside the sap are called "ball-wood," and are manufactured into bowling balls. The larger wood is used in different kinds of shipbuilding. A piece of wood broken from a log shows a wavy, interwoven grain, and is very oily. The wood sinks in water almost as quickly as a stone.

Hardwood is the greatest product known for interior trim and decoration, and the way to get more of it used is to keep driving this fact home to the public.

* * *

There is perhaps many a man who has wished many times this spring that he had loaded up heavily on lumber last year.



F. R. GADD, NEW PRESIDENT CHICAGO LUMBERMEN'S CLUB. E. A. LANG, RETIRING PRESIDENT CHICAGO LUMBERMEN'S CLUB. E. E. SKEELE, TRUSTEE AND PROMINENT IN THE AFFAIRS OF THE CLUB.



Annual of Lumbermen's Club



Monday, March 17, was a gala day for the Lumbermen's Club of Chicago, being the date of its second annual meeting, annual election and a general celebration over the success that the enterprise has attained. The club rooms on the top floor of the Great Northern Hotel building were crowded with members all the afternoon and early evening, during which time the election of officers for the ensuing year took place. The following is the roster of the successful candidates:

PRESIDENT, F. R. Gadd.
VICE-PRESIDENT, John Clancy.
TREASURER, S. C. Bennett.
SECRETARY, T. A. McElreath.
TRUSTEES FOR THREE YEARS: E. A. Lang, E. E. Skeele, W. A. Eager.
TRUSTEE FOR TWO YEARS: Herman H. Hettler.

During the early evening a dinner was given in the club's dining room in honor of Retiring President E. A. Lang, at which upwards of fifty members of the club were present.

At the conclusion of the dinner Mr. Lang was presented with a handsome gold watch and chain, suitably inscribed "With the compliments of his friends and admirers in the club."

The arrangement of the dinner reflects credit on the "engineers" of the function, Messrs. Welch, Quixley and others.

The speech of presentation of the watch to Mr. Lang was a "jewel" in its way and was delivered by George J. Pope. The address is quoted in full:

Some years ago there was founded in Chicago by a number of bright lights and some good Indians the Fields Club. The club took as its creed the following poem, which, with your indulgence, I will read:

I've noticed when a fellow dies, no matter what's he's been—
A saintly chap or one whose life was darkly steeped in sin—
His friends forget the bitter words they spoke but yesterday,
And now they find a multitude of pretty things to say;
I fancy when I go to rest someone will bring to light
Some kindly word or goodly act long buried out of sight;
But if it's all the same to you, just give to me instead
The bouquets while I'm living and the knocking when I'm dead.

Don't save your kisses to imprint upon my marble brow,
While countless maledictions are hurled upon me now;
Say just one kindly word to me while I mourn here alone,
And don't save all your eulogy to carve upon a stone.
What do I care if when I'm dead the Blommingdale Gazette
Gives me a writeup with a cut in mourning borders set?
It will not flatter me a bit, no matter what is said;
So kindly throw your bouquets now and knock me when I'm dead.

It may be fine, when one is dead, to have the folks talk so,
To have the flowers come in loads from relatives, you know;

It may be nice to have these things for those you leave behind;
But just as far as I'm concerned, I really do not mind.
I'm quite alive and well today, and while I linger here
Lend me a helping hand at times—give me a word of cheer.
Just change the game a little bit—just kindly swap the decks;
For I will be no judge of flowers when I cash in my checks.

It does not take a very great flight of imagination to apply this sentiment to almost anyone who has labored for the benefit of others. Too often in this busy life of ours we neglect to say the kind word we meant to have said; we forget to do the kindly act we intended to do, until the opportunity has passed.

We all know that the man that is worth while does not labor for the praise of others; the men that are men of the highest type are far from being satisfied with praise or flattery. The consciousness of a work well done is a wonderful thing. Nevertheless the knowledge of its appreciation is always acceptable.

After a good beefsteak dinner we like a little dessert—the dinner is satisfying, but the ice-cream or pumpkin pie is gratifying; and it is just about the same distinction which I would apply to the self-consciousness of a work well done and the honor which follows it.

This club of ours has been indeed fortunate in having as its first president one who has filled a trying position with tact and skill. I believe that no one could have done more for us than President Lang. He has been faithful and he has been patient; he has given freely of his time and has thoughtfully considered what was for the best interest of the club.

And so, our dear president, your friends have decided that it is fitting you should carry with you, as you leave your office tonight, some expression of esteem which is lasting, changing slightly the words of a beautiful service which I trust we all of us hear at times, "This take in remembrance of us," and every time you look at it may it bring to your mind the face of some good friend, and may every hour that it records mark a period of time in which someone has given you a kindly thought.

For the purpose of gently joking Mr. Lang on the assumption that he was incompetent to make suitable acknowledgment of the gift, the original speech of acceptance was delivered by E. A. Thornton. The speech was of a humorous character, but was closed with the following beautiful lines:

Its pinions and bearings are jeweled,
Its mainspring is jeweled too;
But the beautiful thought that begot it
Is jeweled through and through.

At the conclusion of Mr. Thornton's speech, Mr. Lang thanked his friends in the club in a heartfelt way for this evidence of their appreciation, but he modestly stated that the work was simply participated in by himself, giving credit of performance to the board of managers and the different committees associated with him in the conduct of the club's affairs.

At 8:30 the regular annual meeting of the club was called to order by the retiring president. The feature of the evening was the annual report of Mr. Lang, which is briefed below:

Mr. Lang said that in all probability the Lumbermen's Club of Chicago is the largest social club of lumbermen in existence, but he suggested that the incoming officers should not rest secure in the knowledge of this fact, for many of the present members had given their support when the club was organized because of loyalty to a trade project. He thought that there was great danger of losing some of this support when it appears that a successful launching of the club had been accomplished; that many of these members were affiliated with other clubs and it could hardly be expected that all would remain members of this one. He therefore asked that an active campaign be carried on to the end that the limit of resident membership (400) be reached in the near future. He asked for close co-operation between the house committee and the hotel management, with a view of maintaining a high standard of service in the dining room. This, he thought, would accomplish much in securing new members and retaining the old. He said also that a careful selection of entertainments will assist materially and stimulate in keeping alive the interest necessary for the successful operation of the club, as the members will patronize the club in proportion to the amount of entertainment, pleasure and comfort they can secure from it. He said during the last year the entertainment committee had given seven affairs, which had been well attended. He paid the entertainment and house committees glowing tributes for the hard and conscientious manner in which they have worked for the good of the club. The library and publicity committees also came in for their share of encomiums.

In closing Mr. Lang recommended to the next administration the adoption of the following financial plans:

Immediately upon the appointment of the new committees there should be made up a budget of receipts and expenditures, based upon the best estimates obtainable from the committees, club superintendent and other sources. The finance committee should prepare a careful estimate of the probable receipts from dues and other sources during the two half years and apply against this the expense of conducting various departments and the upkeep of the property of the club; this to guard against assuming any expense or unusual charges not within the estimated receipts of the club.

We go into the next year with a bright future before us. No debts, no litigation, and nothing but good feeling and loyalty apparent. It is my sincere wish that the club may always enjoy prosperity and grow to be one of the strongest trade clubs in existence.

Secretary Klann presented a brief report showing that the board of directors had held twenty-two meetings since the club was organized, fifteen of which were held since the opening night, April 6, 1912. The secretary's office had received and turned over to the treasurer \$16,702.77, and had expended, under the direction of the treasurer and on vouchers duly executed, \$1,488.63. The standing of the membership February 28 was 270 resident and 205 non-resident members, a total of 475, as compared with 483 when the charter list was closed. Death had taken one member from the club's ranks—George Green of the George Green Lumber Company, Chicago, who died August 31, 1912.

Treasurer Robert H. Gillespie in his financial statement showed a balance on hand at the end of the fiscal year February 28 of \$1,814.14. He stated that the club's finances were in better shape than that, as the balance on hand March 15 was \$3,761.57.

E. A. Thornton, chairman of the membership committee, verified Secretary Klann's report and said that it is a well-known fact that the second year of any social club is the crucial year of its existence, but, as the report of the treasurer shows the club to be in excellent financial condition, it requires only the co-operation of the resident membership with the various officers and committees to make the club a really strong social organization. He added that as soon as it has been definitely determined that the lumbermen will have an office building of their own and a home for the club established in this building, the membership will be greatly augmented. With the reports of the library committee, the art committee and the publicity committee, the regular order of business came to an end.

Mr. Lang introduced the new president, F. R. Gadd, who thanked

the membership for the honor conferred upon him, and stated that he felt that he was called upon to fill a position involving great responsibilities. He asked the members to withhold criticism and to co-operate with the officers in making the second year of the club's existence as successful as the first had been.

E. A. Lang, manager of the lumber department of the Paepcke-Leicht Lumber Company, has certainly made a most efficient president of the Lumbermen's Club, and there is apparently just as much promise of good work that will be accomplished by his successor, F. R. Gadd, vice-president of the Wisconsin Lumber Company and manager of the lumber manufacturing department of the International Harvester Company.

The Lumbermen's Club certainly has been very fortunate in the selection of its retiring as well as its new presidents. It is to be congratulated on the marvelous success that has been attained by this year-old club, which brings together in such cordial social relations the larger element of the manufacturing and jobbing lumber trade of Chicago, as well as the out-of-town members of the organization.

Traffic Matters Around Memphis

Lumbermen of Memphis expect to secure a favorable decision from the Interstate Commerce Commission in connection with the proposed advance on hardwood rates from ten to twelve cents per hundred pounds from Memphis and Mississippi points to New Orleans. The hearing in this case was conducted here during the past week before A. H. Elder, special examiner of the commission. The railroads were represented by a number of prominent witnesses, including Joseph Hattendorf, general freight agent of the Illinois Central. The lumbermen were represented by the Southern Hardwood Traffic Bureau and the river and rail committee of the Lumbermen's Club of Memphis. The hearing extended over practically a week and was the longest in connection with any advance which has been proposed by any of the railroads operating in this territory.

The principal contentions of the railroad witnesses were that the increased rates were necessary as a source of revenue and that, as the railroads had contributed largely to the extension of the lumber industry, they were entitled to a share in the increased profits derived therefrom.

On the other hand the lumbermen insisted that there had been no general advance in lumber prices since 1907 and that any attempt on the part of the railroads to increase the rates on gum in order to bring these up to the same level as other hardwoods would result in practically destroying the already established market for this lumber. George D. Burgess, president of the bureau, proved a valuable witness, while the members of the river and rail committee kept close tab on the testimony and aided the bureau in preparing counter evidence. Other witnesses who appeared for the lumbermen were: S. M. Nickey of Nickey Brothers Hardwood Lumber Company, J. D. Allen Jr. of the I. M. Darnell Sons Company, T. E. LeGrone and John Dwyer of the Lamb-Fish Lumber Company, and Elliott Lang of R. J. Darnell, Inc.

The outcome in this case is awaited with unusual interest because the railroads are now holding up other advances pending the decision in this contest. The lumbermen were successful in opposing a similar advance several years ago and they believe that they will be able to obtain a favorable verdict from the commission in the present instance. In the previous case the commission held the advance of two cents per hundred pounds to be both unreasonable and unjustifiable. This was styled *J. W. Thompson et al. vs. the Illinois Central Railroad et al.*, and involved exactly the same issue.

Some of the fellows who used to laugh at red gum will likely be crying for it before many more years roll by.

* * *

The fame of our forests will be made by historians after they have passed into history. Why not let the ad man make some of that fame now and reap some of the benefits?



Advantage of Personal Contact



Who has the advantage—the salesman of a large lumber concern with branch offices and a general sales-office, or the salesman for a small wholesaler who is in direct touch with the principals of his concern? That question has been brought up time and again and the writer claims that the latter “has it on” the salesman of the former in many ways. In the first place the former has nothing but a set of rules to go by and a system to follow out. If he takes an order provisionally it has to go through the system before it finally gets back to him or his customer and delays are fatal in many cases. Illustrating this, a large hardwood buyer wanted a car of clear saps poplar and talked with the local salesman for one of our largest concerns. The salesman’s stock-list showed one or two cars and he took the order at a good price because the buyer wanted it promptly. After a wait of over a week the general sales-office returned the order, saying that one of the other offices had sold that stock about a week before the order was booked. Meantime that buyer had been offered several other cars by wholesalers and all at lower prices. To make a long story short, when the buyer had that order returned from the company, he called up one of the local wholesalers and bought a car that was in transit. Now while this might never happen again, it left a bad impression with the buyer and when the first-mentioned salesman called again he needed another car of poplar, but did not consider that sawmill concern because he didn’t know whether he would get his stock or not. Of course some of you will say that this is an exceptional case, but if you are interested enough to find out, just ask any of your customers whom they would rather do business with—a small, personal-contact wholesaler or a large concern with “much-system-to-go-through-with-before-they-know-where-they-are-at.” The lumber business isn’t any too well systematized at best and a delay in quoting, in accepting an order, in shipping or in holding up an order on account of investigation of credit, is dangerous and is not conducive to further business. The small local concern, on the other hand, is in direct relationship with its local customers and generally has all the information in its office so that it is either “yes” or “no.”

Again, the salesman for the local concern has a better chance of making more money for himself, as his efforts are directly seen by the principals of the concern, and consequently is able to advance faster than with a larger concern. Where the salesman for a large concern is held down to a set of strict rules, the other man has the advantage of taking the matter up with his principals—in many cases he can take orders where the other man cannot.

That brings us up to the question of credits. You must realize that a large concern is in charge of a sales-manager whose duty is to ever put sales on the increase. Then there is the manager of a credit department. These two men work together, but the results are generally far from satisfactory. The sales-manager wants to boost the sales; the credit manager wants to lose as little as possible for his concern. Each man’s job depends on his ability to do it well. The credit manager in nine cases out of ten goes entirely by the agency reports and turns down from five to ten per cent of all business offered. If an order is taken and held up by the credit department for information there are the delays which were mentioned above. And so, with hard and fast rules to go by, the large company is at a disadvantage and will lose many sales. And another thing—when the credit manager is not satisfied he simply says that the company will ship the car and attach sight-draft with bill-of-lading, to which the buyer will reply that he can buy all he wants on his own terms and orders cancellation.

It has been the writer’s experience that the rating of a prospective new customer counts for much less than a close knowledge of local conditions, and that is why most of the wholesalers operating in one locality alone get business that the larger concerns lose. Of course, heads of large concerns will immediately take

exception to that statement and say that they could put men of executive ability in charge of their local offices and carry out the same idea. Well, you couldn’t do it! Why? Because you couldn’t pay them enough money and they can make more in their positions as wholesalers. You know right well that when you get an exceptional man you cannot hold him, for he can make more money by himself.

Being in personal contact with the trade in a certain locality, the writer, either in personal contact with the consumers directly or through the local salesmen, finds that credit should be judged as follows: First, the capacity of the men running the concern, and how they conduct it, their methods, etc.—that is the most important; second, the character of these men and their records; third, the capital. That’s a system of the three “c’s” (capacity, character and capital) and if any of the three are lacking, let it be capital. For example, if a man had a fair credit rating and a large capitalization, but did not know his business or was crooked, would you advance stock to him? Again, if he had the capacity and capital, yet you knew that there were points about his character or past records that would be detrimental to his business, would you sell him? But the man who has the capacity, working along the right lines, pushing for business, is a hard worker and has the character, sell him, regardless of his capitalization. Study of a man’s methods by close personal contact (and, as you see, it can be done this way only by men who are qualified to judge) shows you at once whether you will trust him or not.

A case in the East typifies the above. A large maker of a special cabinet with a national reputation has no rating. He does not make any statements and therefore what reports you secure are not encouraging. The writer handed his report to one of his friends, the owner of a large southern mill, and asked whether or not he would sell him. Indeed, he wouldn’t sell them on any such report. Yet this same millman was very much surprised to learn that the writer had put a number of high-priced cars in there and was still shipping and that most of the bills had been discounted. Then he said, “Well, you’re right on the ground with him and can watch him closer than I.” That comes pretty near proving the writer’s claim, doesn’t it? To go further into detail about this consumer—he is as straight as a die, a hard worker, has a splendid organization, his plant represents top-notch efficiency, he knows his costs, he makes a splendid profit per cabinet and he can’t turn the work out fast enough. He has just doubled the capacity of his plant. The writer one day asked this consumer why he didn’t make out a statement, and he answered, “It’s none of anybody’s business but my own. If people want to sell me, they must judge for themselves (get that—it means personal contact again). You sell me because you know I’m a good risk. If you didn’t you wouldn’t sell me. Another thing, I don’t want to do business with people in far-off places because I can get better service from my local sources of buying. If I find I can’t get credit I’ll make a statement, but as long as I can, what’s the use?”

In the general run of business you will find many good concerns who won’t make a statement, but that pay cash for all they buy. If you went through their plants and saw the way they did business you’d trust them, yet you can’t judge these things from a distance—and that is why you have to pass up the business.

And all this brings us right back to the old question—the logical trade channel. When we say logical, we must give a reason, and that reason is, as it always has been, that it is the lowest-sales-cost-per-thousand feet. That this is being gradually recognized by the mills who formerly thought they had “put one over” on the wholesalers by trying to deal with the consumer direct, is being evinced more and more as time goes on—that is, that the lowest-cost is the principal reason. Then there is the credit end, the fact

that wholesalers are specialists of sales, would leave the manufacturer to devote all his time to manufacturing problems and—but you know the rest of it.

Ask any salesman who has been employed by a large manufacturer who had a sales organization and who then has been employed by a representative wholesaler operating in a

specific section, to tell you which he prefers; there's a good way to tell. The writer thinks you'll find that in the former case he was simply a cog-in-the-machine and that nothing was left to him to use his judgment on, but that in the latter case he had a chance to develop and become a valuable factor in his concern. It's reasonable, isn't it?

H. E. S.



Wood-Using Industries of Maine



The state of Maine, in co-operation with the United States Forest Service, has published a comprehensive report on the forest resources and the utilization of wood in that state. Frank E. Mace, forest commissioner, compiled the data bearing on the resources, the forest laws, and the damage by fire; and the statistics relating to utilization were compiled by Jesse C. Nellis of the Forest Service. It is, therefore, a double report, dealing first with forest resources, and then with the manner in which those resources are put to use.

The year 1911 was disastrous for its fires. The burned area covered 111,077 acres, entailing a loss estimated at \$337,355. Conditions were much better in 1912. During that year twenty-one forest fires were started by lightning, and one by a somewhat unusual cause, a balloon. The record for the year 1912 was 20,240 acres burned, damage \$71,248. The patrol system in Maine has proved highly satisfactory. Men are employed as needed, that is, when the weather is dry and danger is great, and they are taken off when weather conditions render their services unnecessary. A well-planned system of telephones has been established to assist in fire protection. Under the terms of the Weeks law, Maine received \$10,000 from the Federal Government to assist in controlling fires in 1912. Only one other state, Minnesota, received as much.

The sawmills of Maine cut 860,273,000 feet of lumber in 1911, about one-tenth of which was mixed hardwoods, principally birch, oak and maple. In addition to this the output of pulpwood was equivalent to 458,379,500 feet, slack cooperage 24,855,333 feet, tight cooperage 2,332,000 feet, veneers 3,554,000 feet, and firewood the equivalent of about 737,000,000 feet; total forest output for the state, 2,086,393,833 board feet. That shows Maine to be an important producer of forest material, and it stands high in comparison with other states.

The wood-using industries of Maine convert 245,614,150 feet of rough lumber into finished products. This does not include pulp, cooperage, veneers, and fuel. It refers only to factory products such as boxes, furniture, vehicles, interior house finish, agricultural implements, and similar articles. The reports made by manufacturers show that fifty-two different kinds of woods are used as raw material from which the finished commodities are made. That number is evidently too small, for the reason that several kinds are grouped as one. For instance, all spruce is listed as red spruce, though both white and black spruce go to Maine factories, but in rather small quantities. The same observation holds for the oaks, maples, ashes, and others.

Of the fifty-two woods listed, nine are foreign. The most important of the foreign woods is mahogany, but the combined use of all the nine falls considerably below 200,000 feet a year. It is thus shown that Maine is not a large user of foreign woods. In fact, the manufacturers there depend largely upon the forests of their own state for what they need. Less than 34,000,000 feet were brought into the state and this was made up chiefly of white pine, red spruce, balsam fir, yellow birch, sugar maple, longleaf pine and loblolly pine. White pine, spruce and birch grow abundantly in Maine, and that which came across the border was imported only because it was convenient. The largest quantity of outside wood shipped in was longleaf pine from the South. Of the birches used, the largest amount was paper birch, which is the chief material for spools; yellow birch, useful

for flooring and furniture, was next in quantity, while sweet birch was used to the extent of only 5,000 feet.

Though the hardwoods in Maine constitute only about one-tenth of the total sawmill cut in the state, the hardwoods going to factories for conversion into finished commodities exceed one-third of all wood reported, indicating that, as material for manufacturing, hardwoods are in much more demand than softwoods. In this comparison, the hardwoods are broadleaf trees, and the softwoods are those with needleleaves. Three woods constituted sixty-five per cent of all. They were white pine, paper birch, and spruce. Willow at \$12 per 1,000 feet was the cheapest wood, while teak at \$400 was the most expensive.

The principal industries in Maine which use wood as raw material, and the annual quantity demanded by each are the following:

Industry	Feet.	Cost.
Boxes	25,741,000	\$617,530
Planing Mill Products	21,335,000	511,244
Shuttles, Spools, Bobbins	13,055,400	438,096
Sash, Doors, Etc.	10,734,200	180,503
Boot and Shoe Findings	10,299,400	355,214
Ships and Boats	9,310,000	193,508
Handles	8,196,500	189,405
Woodenware	7,532,000	112,434
Dowels	5,704,500	105,915
Laundry Appliances	4,431,500	133,955
Car Construction	4,269,000	85,559
Toys	3,765,000	86,742
Furniture	3,050,000	86,775
Matches and Toothpicks	1,054,500	25,633
Vehicles	647,600	14,471
Caskets and Coffins	645,000	12,245
Brushes	533,000	11,337
Printing Material	389,000	23,046
Fixtures	320,000	5,120
Dairy Supplies	302,000	4,475
Butcher Blocks	285,000	5,375
Bungs and Faucets	269,500	5,260
Chairs	230,000	4,818
Athletic Goods	94,250	3,386
Patterns	54,400	1,780
Pulleys and Conveyors	41,000	880
Miscellaneous	4,456,000	70,625
Total	245,614,150	\$4,957,035

The average cost of the woods used in the above industries, when delivered at the factories, was \$20.18 per 1,000 feet.

An Old Roof

The lasting properties of wood have been discussed many times and by some persons it is looked upon as an old story; but a recent order to examine the timber roof of Westminster Hall calls attention to a famous wooden structure which has stood in the damp climate of England 514 years. The roof was placed on that building in 1399 in the reign of Richard II. It displayed the original Norman structure. The roof which is to be examined includes the timbers and supports only. The part which is exposed to the weather and sheds the rain is made of sheets of lead. The purpose in examining the roof is to make sure that decay has not weakened the timbers.

No man ever invented a system that was good enough to run a business by itself; but there are several, either of which will help a man considerably in the conduct of his business.

The Mail Bag

Any reader of HARDWOOD RECORD desiring to communicate with any of the inquirers listed in this section can have the addresses on written request to the Mail Bag Department, HARDWOOD RECORD, 537 South Dearborn Street, Chicago, and referring to the number at the head of each letter and enclosing a self-addressed stamped envelope.

B 409—In Market for Basswood

Kiel, Wis., Mar. 8.—Editor HARDWOOD RECORD: We are in the market for several carloads of 1½ inches and 1¾ inches No. 2 and No. 3 common dry basswood, and also some ash. Do you know where we can get it?

The above inquirer has been supplied with a brief list of possible sources of supply for this lumber, and any others interested in the inquiry can have the address on application.—EDITOR.

B 410—Has Birch for Pacific Coast Market

Springfield, Mass., Mar. 18.—Editor HARDWOOD RECORD: Kindly advise us as to a list of wagon manufacturers on the Pacific coast who use birch.

The foregoing letter is from a leading eastern manufacturer who has been supplied with a list of wagon manufacturers on the Pacific coast, and has been advised that a large portion of them employ a greater or lesser quantity of birch.—EDITOR.

B 411—Seeks Timber Census

Brooklyn, N. Y., Mar. 15.—Editor HARDWOOD RECORD: Some months ago, if I remember correctly, you published a very interesting and valuable article in regard to the standing timber in the United States, and a map showing its location. Can you send us a copy of this issue of your paper?

The writer of the above letter has been advised that we think the article to which he refers appeared in HARDWOOD RECORD, December 25, on pages thirty-four and thirty-five, copy of which was mailed him. This graphic map and text referred to lumber production and did not involve a census of the standing timber. The writer has been advised that the latter is absolutely an unknown proposition, even after all the work that has been done by the census department and the Forest Service. The quantity of standing timber remaining in the United States is simply a guess.—EDITOR.

B 412—Wants 5/8-Inch Beech

Reading, Pa., Mar. 17.—Editor HARDWOOD RECORD: Can you put us in communication or give us the names of some firms that handle beech lumber? We are in the market for 5/8 inch stock.

MANUFACTURING COMPANY.

The foregoing inquiry is from a specialty manufacturing house, and anyone interested in marketing 5/8 beech can have the address on application.—EDITOR.

B 413—Seeks Oak, Poplar and Spruce

Glasgow, Scotland, Mar. 1.—Editor HARDWOOD RECORD: As we are very anxious to increase our business for the sale of northern hardwoods, we take the liberty of writing you to ascertain if you could favor us with the names and addresses of some reliable shippers of northern white oak lumber, railway oak planks, poplar and West Virginia spruce. Also if you know of any reliable southern shippers of ash and hickory logs and hickory dimension stock.

The above letter is from a leading Scotch timber brokerage house, which has been supplied with a brief list of possible sources of supply for the woods mentioned. Any others interested can have the address on application.—EDITOR.

B 414—New Cabinet Woods

Louisville, Ky., Mar. 11.—Editor HARDWOOD RECORD: We have some sample logs of new cabinet woods, with whose properties we are desirous of becoming acquainted before we attempt marketing them. HARDWOOD RECORD has been carrying a series of articles on the cell structure, strength, etc. of various woods, and it has occurred to us that the author of these articles might be prevailed upon to analyze these woods for us. We want as complete a report as possible on the cell structure, texture, strength, dry weight, density, etc., and the probable availability of them for cabinet or other purposes.

The writer of the above letter has been advised that if he will supply this office with specimens of the wood in question they will be carefully analyzed for him, and a report made thereon.—EDITOR.

B 415—Forked Leaf Oak Trademark

Pine Bluff, Ark., Mar. 8.—Editor HARDWOOD RECORD: We are getting up stationery for our new hardwood company, and it is our intention to show the foliage of a forked leaf white oak with an acorn as a trademark for our oak flooring. Will you kindly supply us with a picture showing the form of the leaf of this tree, and very much oblige?

The writer of the above letter has been supplied with a leaf print of forked leaf white oak.—EDITOR.

B 416—Condemns Oak Price Boosting

Detroit, Mich., Mar. 12.—Editor HARDWOOD RECORD: In the interest of good common sense and conservative action, we want to ask you to use your influence to check the radicals who are at this time seeking to boost the price of oak lumber beyond a safe and normal condition. You know that we are interested on both ends of the game as our sawmill plant at Kentucky gets the benefit of high prices in rough lumber, but just from a common sense standpoint, remembering what happened to poplar five years ago, we think it is time to call a halt in boosting the prices of oak lumber, and your journal will have a very marked influence in this matter through your editorial columns. Please advise us what you think of this proposition.

Thanking you for attention, we are,

The foregoing letter is from the president of a foremost concern engaged in the manufacture of oak lumber and the production of oak flooring. The writer's attention has been called to the cartoon published in HARDWOOD RECORD, February 10, and the editorial comment on the oak situation made on that date, which is entirely in accord with the opinions expressed in this letter. Beyond question there is a serious menace in continued prosperity in the hardwood lumber business when values are placed at an unreasonably high level. Substitute materials other than lumber take the place of fancy priced wood, and once these substitutes are established in public appreciation, they are very hard to dislodge.—EDITOR.

B 417—Seeks White Ash Logs

Dayton, O., Mar. 13.—Editor HARDWOOD RECORD: We are continually in the market for prime second-growth white ash logs. Can you furnish us with the names of parties who can supply us the logs or small mills that manufacture this stock?

The foregoing letter is from a leading specialty manufacturer who has been supplied with a brief list of possible sources of supply for ash logs.—EDITOR.

B 418—Seeks White Ash

Columbus, O., Mar. 15.—Editor HARDWOOD RECORD: Can you give us the names of some parties in West Virginia who can saw ash in special dimensions for me?

The writer of this letter has been given a brief list of possible sources of supply of the stock desired.—EDITOR.

B 419—Who Wants Sassafras?

Owensboro, Ky., Mar. 15.—Editor HARDWOOD RECORD: We have several cars of sassafras logs we would like to find a market for. Would thank you to put us in touch with buyers of this wood.

The writer of the above letter has been advised that while there is a limited market for this excellent wood we are unable to give him a specific place for its disposal. Hence, anyone interested in the purchase of sassafras logs or lumber can have the address of the writer on application.—EDITOR.

B 420—Has Applewood to Sell

FRONT ROYAL, VA., March 17.—Editor HARDWOOD RECORD: Is there a market for applewood, and if so, are you in position to put us in touch with somebody interested in this wood? We could furnish a carload in the log.

The above manufacturer has been supplied with a brief list of users of the material he has to offer.—EDITOR.

In cutting a tree into logs the sawyers too often do not take pains to secure the highest quality of material. The rule should be to keep the best portion of the bole in separate logs from the knotty portions. It is not uncommon to find several feet of clear length put into a log with several linear feet of knotty material. Such action is costly since the value of the log is largely determined by its poorest section. It may often prove more profitable to waste a few feet of rough log if by so doing the amount of high-grade lumber can be increased.

News Miscellany

Meeting of Memphis Lumbermen's Club

The Lumbermen's Club of Memphis, at the meeting held at the Hotel Gayoso, Mar. 15, unanimously adopted resolutions approving the bill to be introduced into the Tennessee legislature for the purpose of creating a forestry department in charge of a state board of forestry composed of nine members, headed by the governor of the state. This action was taken following an address by H. W. Lewis setting forth the objects to be accomplished by the bill. He said that the forests of Tennessee were being cut at such a rapid rate as to insure depletion of the timber supply within a comparatively short time unless steps were taken to reforest the waste lands. He declared that it was not the purpose of the bill to do anything that would be objectionable to the lumbermen of the state in any way, but that, on the other hand, it would be the purpose of the department to provide timber that would be suitable for the lumbermen in later years. He outlined the measure, briefly pointing out that the work was to be under the direction of the board, which was to employ a chief forester to be recommended by the head of the forestry department of the United States and one assistant forester for each of the three grand divisions of Tennessee. He also said that experiment stations were to be established in practically all the counties and that seedlings were to be furnished to lumbermen at actual cost. As an illustration of the working of the proposed measure Mr. Lewis said that there were 100,000 acres of land outside the levees in west Tennessee so subject to overflow as to be unavailable for agricultural purposes. He thought that this would afford an excellent opportunity for reforesting with cottonwood. He said the land would be vastly improved and that a merchantable supply of cottonwood would be available within thirty years. Mr. Lewis said that the Southern Commercial Congress was behind the bill and that, when it had been passed in Tennessee, efforts would be made to secure similar legislation in the other southern states not already having a forestry department. His address created very great interest and was followed by a number of questions prompted by what he had said.

S. B. Anderson of the law and insurance committee said that he had gone over the bill very carefully and had ascertained the fact that there was nothing therein objectionable to the lumbermen. He approved the fundamental principles of the measure and declared that the forests of Tennessee were being cut at such a rapid rate that some steps toward reforesting ought to be taken. He believed in adopting the plan of Germany, which is to put all lands in forests, which are unavailable for agricultural purposes. He particularly approved the suggestion of Mr. Lewis for reforesting the lands outside the levees in west Tennessee, as well as the islands in the Mississippi river. He suggested that the club adopt approving resolutions which had already been prepared. This was done by unanimous vote.

J. W. Spaulding of the Paine Lumber Company addressed the club in behalf of red gum. He brought a round of applause when he expressed the hope that red oak might be \$15 per thousand higher in order that red gum might become the standard for interior finish. He thought this lumber was superior to red oak in more than one respect and pointed out the fact that there were no hidden defects and that the figuring was much more perfect. He told the lumbermen that he has done everything in his power to secure the change in specifications from birch to red gum in connection with the new Chisca hotel which is being erected here. The Paine Lumber Company has the contract for the mill work in connection with this building.

It was quite apparent from a report made by C. W. Holmes of the J. J. Holmes Lumber Company that the insurance companies had already begun revising rates for Memphis as a result of the activity of the law and insurance committee. Mr. Holmes said that he had been advised that revised schedules had been issued reducing the rates in the case of a number of yards in New South Memphis and that he understood that still further reductions were to be published at an early date. M. V. Rush of Moffet, Bowman & Rush advised the club that the rates on the yards of his firm had been reduced from \$2.26 to \$1.45, with a further reduction to be made as soon as there had been compliance with regulations regarding the fire alarm boxes to be used. This revised schedule is being published under the auspices of the Tennessee Inspection Bureau. Lumbermen are very much gratified with the reduction in rates by the law and insurance committee, which has had this matter in charge and will continue its activity to the end that further reductions may be effected.

J. W. McClure of the river and rail committee reported that he and other members of his committee had spent practically all the past week attending the hearing before the Interstate Commerce Commission at the Hotel Gayoso, involving the proposed advance of two cents per hundred pounds on hardwood lumber from Memphis to New Orleans. He said the results of this hearing would be very far reaching, as further advances were being held up by the railroads pending the outcome in this case. He felt sure that the ruling would be particularly important as affecting cottonwood and gum, which the railroads were seeking to raise to the

same rates as other hardwoods. He pointed out that the case was handled admirably by the Southern Hardwood Traffic Bureau and that much splendid work had been done by the lumbermen who testified that the committee was hopeful of the outcome.

A letter was read from the Lumbermen's Club of St. Louis, extending to members of the local club an invitation to make their headquarters at the offices of the former whenever they were in St. Louis. It was pointed out that codes, telegraph blanks and other facilities for the transaction of business would always be found ready to hand. The club acknowledged this communication with thanks and extended an invitation to the members of the Lumbermen's Club of St. Louis to make their headquarters in the offices of the Lumbermen's Club of Memphis when in this city.

This meeting was exceptionally well attended and proved one of the most interesting as well as the most enjoyable held this year.

The following new members were elected: Active—C. T. Whitman of the Whitman Lumber Company, Earl, Ark.; J. S. Williford, Belgrade Lumber Company, Memphis; Chris H. Meyer, Nickey Brothers Hardwood Company, Memphis; Associate—George F. Rammelsberg, Clarendon Car Factory, Clarendon, Ark.; H. H. Alexander, Alexander Brothers, Belzoni, Miss.; Thomas H. Paine, Ward Lumber Company, Sunflower, Miss.

Monthly Meeting Philadelphia Lumbermen's Exchange

The Lumbermen's Exchange held its regular monthly meeting, preceded by a luncheon, Mar. 13. President William F. Betts in the chair. It was announced at this meeting, that the annual banquet would be held this year on Apr. 10, on the roof garden of the Bellevue-Stratford hotel.

J. Randall Williams, Jr., chairman of the committee on forestry, gave notice that the Pennsylvania Forestry Association would hold an exhibition in Horticultural hall, from May 19 to 24, to which the exchange is urged to send an exhibit. The State Forestry Association and the various state colleges are sending elaborate exhibits. The president appointed J. Randall Williams, chairman, B. Franklin Betts, Amos Y. Leshner, Isaac Troth and John E. Lloyd, a committee to take the matter up.

An interesting address by Amos Y. Leshner, on "Why Retailers Should Become Members of the Lumbermen's Exchange," was much appreciated at this meeting. A resolution was passed that a copy be sent to all who are not members of the Exchange. The reading of papers on topics of particular interest to lumbermen at these Exchange meetings is an institution of President William T. Betts, who incidentally admits that it was through a suggestion of Secretary John H. Lank, that his attention was first called to the matter. They will be the means it is believed of enlarging the attendance, and so increasing the membership of the Exchange.

Railroad Constructors Meet

The fourteenth annual convention of the American Railway Engineering Association was held at the Congress hotel, Chicago, Mar. 18-21. The sessions brought out a vast quantity of useful discussion and numerous papers of high practical and technical value. There were submitted bulletins on railways and organization; iron and steel structures; track; rail; economics of railway location; wooden bridges and trestles; wood preservation; ties; signs; fences and crossings; conservation of national resources; buildings; grading of lumber and numerous other topics of equal importance. On the fourth day of the meeting, those in attendance visited the National Railway Appliances Exhibition at the Coliseum. The annual dinner was held on the evening of Wednesday, Mar. 19.

National Inspection for February

The statement of the inspection bureau of the National Hardwood Lumber Association for February, 1913, shows the total of 9,903,727 feet which is an increase of 709,394 feet over February, 1912. The salaried inspectors' work for the month covered 1,771,433 feet more than February, 1912, while the fee inspections are about 1,000,000 feet under the February, 1912, record. This volume of inspection cost the association \$593.93 in excess of amount earned, which is due in a large measure to the unfavorable weather conditions that prevailed in many sections.

Since the last report of Feb. 15, fifteen new applications for membership have been received, bringing the total for the present fiscal year to 110.

The sixteenth annual convention will be held June 5 and 6 at Chicago, Ill., with headquarters at Hotel Sherman. There is sure to be a very large attendance and the secretary expects to announce the program of business and entertainment at an early date.

Biltmore Doings for February

Students of the Biltmore Forest School left their winter quarters at Darmstadt, Germany, for their annual trip to the Black Forest of Germany on Feb. 6. Of all the wooded districts of Germany none presents such beautiful and varied landscape as the Black Forest nor is any so famous both sylviculturally and historically. En route the students stopped at Karlsruhe. Here they were privileged to visit, under the guidance of the forest superintendent, the city forests and also a forest of several hundred acres owned by a stock company, which pays about four per cent on the par value of the stock. These stockholders are using the forest for a hog pasture, owing to which a natural second growth of pine presents itself.

The most interesting and instructive trip during the journey through the Black Forest was the visit to the Schifferschaft. This forest consists of 1,200 acres and has been under the control of the same corporation for seven hundred years. It possesses a most unique history. The original owners were lumbermen who cut the timber and sent their drives down the Marg and Rhine rivers to the Holland trade. Prior to 1718 the existence of many small principalities through which the logs had to pass before reaching the market brought about conditions under which it paid to cut only the very best of the trees. Within recent times the increase of transportation facilities and the consequent broadening of the market, together with the possibility of marketing any and all of their wood products, has made the enterprise very profitable. Many of the stockholders are also mill owners and, buying their own timber, make a double profit. They demanded, however, the best and most accessible logs, with the result that the lower strips were soon stripped of the best growing timber. The results of their destructive methods are still to be seen in the varying treatment which has had to be applied to each portion separately in order to restore it to a paying basis. With the advance of lumber prices, the old methods were dropped and it became imperative to treat the forest to constructive rather than destructive methods. The old splash dams are a thing of the past and everywhere the forests are traversed by the finest of macadam roads. On steep slopes, the logs are lowered at the ends of ropes. By taking a turn of the rope around a standing tree, the progress of the logs can be easily controlled.

In the Black Forest the forest rotation is one hundred and twenty years. This means that it takes that time to develop a stand of timber to the point of maturity, when it is cut and the process started over again. Inasmuch as different sections are maturing each year, there is a constant source of supply and constant work being done to regenerate where the mature stands are cut. There is still a considerable amount of big timber in the Black Forest.

The students also visited an extensive furniture manufacturing plant near Darmstadt where they had an opportunity of comparing German with American methods. The general methods are not unlike those employed in American furniture factories, but the finished product is far more artistic in design than the average high-grade American product. It is often more solidly and perfectly made in all of its parts. Genuine old pieces of furniture are used as models. French cottonwood is used for the veneer cores. Walnut root wood veneer was shown costing \$2.00 per sheet of 16x18 inches.

In the last excursion of February the students found themselves, instead of in the woods or at sawmills, traveling the narrow and crude streets of "Old Frankfurt." No city of Germany has a greater wealth of history behind it than has Frankfurt, which first came into prominence in the time of Charlemagne. From then on it grew steadily in importance and in 822, at the time of Louis the Pious, it was looked upon as the capital of the Frankish empire. From the time of Frederick Barbarossa, the German sovereigns were chosen at Frankfurt. All the emperors from Albrecht to Francis II were crowned in this quaint old city. From the tenth down to the nineteenth century, when it became part of Prussia, Frankfurt was a free city. At the present time it contains 370,000 inhabitants and is one of the most important commercial centers of Germany. Its money market is almost as influential as that of Berlin and the whole appearance of the newer city indicates general prosperity. It was the old part of the city, however, which commanded the interest of the students. They were shown all types of German architecture from the Roman to the German renaissance and it can be said that Frankfurt contains some of the best examples to be found in Germany.

As announced formerly, the students sailed on Mar. 15 on the S. S. New Amsterdam of the Holland-American Line. Headquarters upon return to America will be Tupper Lake, N. Y., in the heart of the Adirondacks.

A Splendid Example of End-drying

Accompanying this story are two photographs illustrating well the splendid results obtained by careful end-drying in northern stock. These



MODERN END-DRYING SHED, STEARNS SALT & LUMBER COMPANY, LUDINGTON, MICH.

sheds are part of the extensive equipment of the Stearns Salt and Lumber Company of Ludington, Mich. W. T. Culver, vice-president and active manager of this company's extensive operations, has made an exhaustive study of the possibilities of end-drying and has come to the unqualified decision that this method produces the very highest and most uniform results in all species of high-grade northern stock. As a consequence, while this company devotes its end-drying sheds principally to the drying of white maple, it is putting various kinds of high-grade lumber up in this way and it is its intention to expand considerably in this line. The experiments, which covered a period of two years, established the fact that while the cost is somewhat greater, the results are so far more satisfactory as to leave no more room for doubt as to which method should be pursued. The greatest benefit is derived from drying stock in this way, which is in any way designed for special requirements. The superior condition of the stock will more than offset the cost.

It can be seen from the exterior view of the shed that narrow strips are used on the outside of each course. These strips are of dry hemlock and prevent side discoloration, along the edges of the outside pieces. The Stearns company uses only one narrow crosser, which is thoroughly dry and therefore prevents the possibility of sticker marks. The floors of the sheds are built up even with the tramways which allows a perfect air circulation. Thus far, the experiments have covered bird's-eye maple, white maple, straight-grained maple, red birch, sap birch, straight-grained beech, white basswood and various other special orders of unselected stock. The company's sheds now have a capacity of from 3,500,000 to 4,000,000 feet a year and it is hoped that this capacity will eventually be doubled.

Suffered Small Loss by Fire

The New England Hardwood Company, of Mountain Mills, Vt., suffered a small loss by fire on the morning of March 9. Its office building, containing its office, store and the postoffice, was completely destroyed. The new mill, which stands only about one hundred feet from the burned buildings, was saved by a fortunate wind which shifted the fire in the opposite direction. The fire was discovered a little before five o'clock in the morning, and owing to want of fire protection the loss, so far as the buildings and contents were concerned, was pretty nearly a complete one. However, the loss to the company is not serious, as it was fairly well covered by insurance.

Expansion of Willey Interests

An important expansion of the manufacturing interests of C. L. Willey, the leading mahogany lumber and veneer producer of the country, at his Chicago plant is in its initial stages. Mr. Willey has just closed for the purchase of a frontage of 1,443 feet lying between Slip E and Robey street, immediately south of his present big plant and land holdings, for a consideration said to be about \$200,000. The vendor of the property was Mrs. Charles P. Taft of Cincinnati.

This purchase gives Mr. Willey about twelve and a half acres of land with railroad trackage on two sides extending from a point a short distance south of Blue Island avenue, on the south branch of the Chicago river, clear to the Drainage canal.

From a historical viewpoint this purchase has a special interest as it is on this site that the landing of Marquette in 1673 took place, which is recorded by a big mahogany cross erected by Mr. Willey a few years ago, which was dedicated by the Illinois Historical Society.

At the present time Mr. Willey is engaged in remodeling his sawmill and veneer plant, and extending it with a view of increasing his output materially. He has just purchased from the Allis-Chalmers Company a Pacific coast type band sawmill, which will supplement his present band mill, and will shortly install another and smaller one for the conversion of core stock into crating material, making the whole equipment a three band sawmill. He has also just placed in commission a Kraetzer Preparator for the steaming under pressure of mahogany and other high-class cabinet woods to prepare them for prompt and accurate seasoning.

Right now Mr. Willey has what is probably the largest and finest holdings in the history of the trade; and besides he has other large log purchases



END DRYING HIGH-GRADE STOCK, SHOWING PROTECTION STRIPS ON EDGES OF BOARDS.

contracted for both in the tropics and at Liverpool, which insure him a full stock of fancy veneer flitches and fancy wood lumber material for nearly a year to come.

The high price of oak and other better types of American woods has resulted in a tremendous increase in demand for mahogany and other imported woods. This has resulted in not only that Mr. Willey but all other fancy wood producers are extremely busy at the present time with a demand that exceeds the supply.

New Oak Flooring Factory

As is generally known to the trade, the larger proportion of the lumber product of the Yellow Poplar Lumber Company, Coal Grove, O., is now white oak from that region of the splendid growth of this wood in Dickinson County, Virginia, although a considerable quantity of yellow poplar is still being made. Fully eighty per cent of the output of this sterling hardwood house is now white oak, the larger portion of which is manufactured into quarter-sawn stock.

The company is now engaged in the building and equipping of an oak flooring plant at Coal Grove, in connection with which there has already been put in commission a new Grand Rapids dry kiln of the latest type, and within the next month the entire installation of electrically driven machines will be in place for the production of flooring.

Death of D. P. Mann

Lumber interests in Memphis were very much shocked Sunday, March 16, by the announcement of the death of Donald P. Mann, vice-president of the Chapman-Dewey Lumber Company, which occurred the night before. Mr. Mann had been quite ill for some time but his partner, Mr. Dewey, who had been with him for some time, left on a business trip Saturday

on the theory that he was very much improved. His death occurred a few hours later from heart trouble. He was known to be in a somewhat serious condition but the end was not expected so soon.

Mr. Mann came to Memphis from Kansas City. He had been engaged in the newspaper business at that point. He became associated with the Chapman-Dewey Lumber Company and for a long time looked after the interests of this firm at Marked Tree, Ark. The firm largely increased its holdings in that territory and later Mr. Mann not only became a partner in the firm but was elected vice-president. He was one of the best known lumbermen in this part



CHAS. K. PARRY, PHILADELPHIA. VICE-PRESIDENT CAROLINA SPRUCE COMPANY

of the country. He leaves a wife and two children. He also had three brothers and three sisters. Two of the former are Bishop Cameron Mann of North Dakota, and Rev. Alex Mann of Trinity Church, Boston.

Chas. K. Parry & Co. Make New Connection

Beginning April 1 Charles K. Parry & Co., Philadelphia, will offer to the trade, the product of the Carolina Spruce Company, Pensacola, Yancey County, N. C. The tract of timber was formerly known as the Johnson tract, and is conceded to be one of the finest in that section. Everything new and the best to be had has been installed; a Wheland band mill, a new American loader and a new Shay engine, which outfit will place this company in a position to furnish to the trade the best manufactured lumber possible today.

The officers of the Carolina Spruce Company are C. S. Aldrich, formerly of the Nelson Lumber Company, Johnson City, Tenn., president and general manager; Charles K. Parry of Charles K. Parry & Co., Philadelphia, vice-president; L. E. Faulk of Pensacola, N. C., secretary and C. A. Oberlin, formerly of the Nelson Lumber Company, treasurer.

Planing mill facilities will be added this summer, and the capacity of the mill will be not less than an average of 90,000 feet daily. The timber was estimated at 140,000,000 feet all in one compact body. Of this approximately 100,000,000 feet is spruce and the balance mostly hardwood with some hemlock. The first cut will be hemlock and spruce, although there is at present about two million feet of hardwood ready for shipment. All of this timber is exceptionally large, nothing ever having been cut from it. Many of the poplar, oak and chestnut logs are too large to handle with ordinary equipment. Railroad connection has just been established, as the timber lies eighteen miles from Boonford, on the C. C. & O., which railroad has financed the Black Mountain railroad, built from Boonford to Pensacola, in order to get the hauling of this

lumber. The railroad rates are all favorable to the eastern shipment of this lumber, and the entire output will be handled by Charles K. Parry & Co., at 1431 Land Title building, Philadelphia, Pa.

Charles K. Parry, vice-president of the Carolina Spruce Company, and owner of Charles K. Parry & Co., has had much valuable experience in the lumber business. In 1909 the present firm of Charles K. Parry & Co. was formed. Mr. Parry evidently inherits his knowledge of the lumber business as his father conducted a large retail yard near Hattboro, Pa., for twenty-five years, and his great grandfather, Isaac Conard, operated a sawmill where now stands that section of Philadelphia known as Kensington. Mr. Conard bought rafts, which were at that time floated down the Delaware river, also sawed locally for people owning timber in the immediate vicinity of Philadelphia. Mr. Parry is vice-president of and controls the output of the Selma Lumber Company, Selma, N. C. He also controls the Ohio Lumber Company, Bingham, S. C., and is interested in and controls the output of B. B. Gray, at Pine Bloom, Ga.

Baird-Coale Lumber Company

The Baird-Coale Lumber Company is a new lumber organization that has just been incorporated under the laws of Delaware with a paid up capital of \$15,000, and home office at 814 Fisher building, Chicago, which will commence doing business on Apr. 1. The principals of the company are D. W. Baird, president and general manager, and George M. Coale, vice-president and treasurer.

D. W. Baird, who has been identified with the Chicago lumber trade for several years under the title of the D. W. Baird Lumber Company, was born at Greenwood, Clark county, Wis., August 27, 1877. He is unanimously known in the trade as "Dan." He started in the lumber

business in 1897 with the Fenwood Lumber Company at Fenwood, Wis., as inspector. In January, 1898, he went with the Morton-Edgar Lumber Company at Lancaster, Wis., as buyer and inspector of northern hardwoods. In January, 1899, he engaged with the Tucker-Hooper Lumber Company, Chicago, as buyer and inspector of southern hardwoods, and a year later joined the Dudley Lumber Company, Grand Rapids, Mich., as manager of its southern hardwood operations, and opened up a yard for that company at Logansport, Ind., and later in Memphis, Tenn. He remained with this company for six years and then went with Banks & Co., Hernando,



D. W. BAIRD, PRESIDENT BAIRD-COALE LUMBER COMPANY, CHICAGO.

Miss., as general manager of their sawmill operations and domestic and foreign sales, where he remained until January, 1910, when he established the D. W. Baird Lumber Company, which institution was removed to Chicago on Jan. 1, 1911. This company has done a largely increasing business from that time until now, when the concern is being merged into the new Baird-Coale Lumber Company.

George M. Coale, vice-president and treasurer of the new concern, was born at Gosport, Clarke county, Ala., May 30, 1885. He started in the yellow pine business as clerk for the Kirby Lumber Company, Beaumont, Tex., and from there went with the Keith Lumber Company at Voht, Tex., as chief clerk to the secretary and sales manager. This position he held for two years, gaining much practical mill experience. In 1905 he went with the Continental Lumber Company at Houston, Tex., as chief clerk, where he remained until the first part of 1907, when he succeeded Ben S. Woodhead as secretary and sales manager, where he remained until October, 1909, when he re-entered the employ of the Kirby Lumber Company as northern sales manager with headquarters at Chicago. On Feb. 1, 1911, he returned to the Continental Lumber Company as vice-president and sales manager, which position he has held up to the present time, when he resigned to join D. W. Baird in the Baird-Coale Lumber Company.

The many friends of both principals of the Baird-Coale Lumber Company will wish the new company the success it undoubtedly will achieve because both the principals are well-equipped to command an excellent business in Chicago and vicinity.

Smoker of St. Louis Lumbermen

The St. Louis Lumbermen's Club held a smoker in the cabin at Faust's Restaurant on Tuesday evening, Mar. 18. The fun began when the members sat down to a Dutch lunch and did not end until many enter-

taining features were pulled off. President Whitmarsh did not take up much time when he called for order. He only told of several innovations, in addition to those already mentioned, that would be inaugurated later on. Quite a number of new names were added to the roster of the club. In addition to the lunch, there was plenty to drink and the hundred members who attended the smoker enjoyed every moment. There was singing, music by a rag-time player, and a cabaret entertainment. Julius Seidel, chairman of the entertainment committee, was responsible for the entertaining features. The evening was one of the most enjoyable spent by the club for a long time.

New Plant of Saranac Machine Company

The accompanying illustration gives an excellent idea of the new manufacturing plant just completed by the Saranac Machine Company, Benton Harbor, Mich. This building is located midway between Benton Harbor and St. Joseph and is easily reached from either city by electric cars.

This firm started some fourteen years ago in a small way and its growth has been steady until finally the increasing volume of business and the large demand for its machinery compelled the company to erect the new factory which it now occupies. Here every facility for the construction and erection of the high-grade products of its factories is provided. The new location is situated on a tract of land that provides ample room for expansion as necessity demands it.

The main building of the new plant is 60 x 192 feet. The front section has two floors. Heavy mill construction with a foundation of reinforced

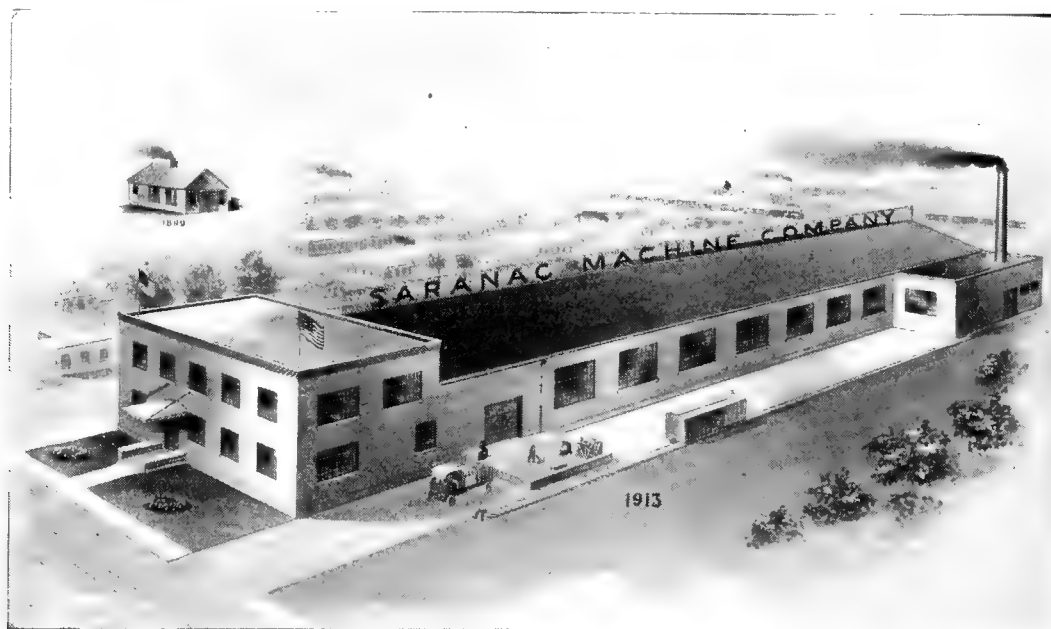
the laws of Michigan. The firm's policy is extremely progressive and it incorporates in its products the most advanced ideas. The company maintains a complete and competent engineering department for the designing of machinery, which department is always at the command of its customers.

New Hardwood Concern in Minneapolis

The Joyce Bartell Company is the style of a new concern organized at Minneapolis, which brings together two men who have been prominently identified with the lumber business for years. The incorporation consists of John Joyce of Ashland, Wis., president; W. D. Bartell, Minneapolis, vice-president; and W. L. Joyce, Minneapolis, secretary and treasurer. Mr. Bartell and W. L. Joyce will be the active principals in the business and will both be located at Minneapolis. They are both men of experience and there is every chance of their establishing for the new firm a prominent place in the hardwood lumber trade.

John Joyce is a well known lumberman of northern Wisconsin. He is a member of the Foster Latimer Lumber Company of Mellen, Wis., and the Mellen Lumber Company of the same place. W. L. Joyce is the son of John Joyce and started his career in the lumber business with the Foster-Latimer Lumber Company at Mellen. Four years ago he went to Minneapolis. He first was affiliated with the Forest Lumber Company and later with the Joyce-Connor Lumber Company, which took over the business of the Forest Lumber Company at Minneapolis.

W. D. Bartell has for sixteen years been prominently associated with



PLANT OF SARANAC MACHINE COMPANY, BENTON HARBOR, MICH.

concrete was used. The factory floor is divided into three sections or bays. The east bay is utilized for the erection of the lighter types of machines, the north bay contains the machine tools, all of which are of modern design, and the west bay is used for erecting the heavier types of machines and is served with overhead traveling cranes. The arrangement of the factory is such that the company is able to obtain straight line production, thus doing away with any necessity of re-handling.

One of the important items of production of the Saranac Machine Company is the single and multiple head wire stitching machines used in the manufacture of bushel basket covers, fruit crates, berry boxes, wire bound boxes, etc. In addition, a large percentage of the automatic machinery used in the manufacture of wire and veneer and paper butter dishes has been manufactured by this firm. Its automatic machines for turning out berry boxes of veneer or paper have a capacity up to one hundred complete baskets per minute. The company's automatic paper package machines are a marvel of efficiency. These machines take the paper from the roll and feed, print in one or more colors, cut, crease, set up, wire stitch, wax line and deliver the package complete at a rapid rate. In fact, the firm has an international reputation as a designer and producer of high-grade machinery for the production of veneer and paper packages.

For the wooden packing box trade, three types of corrugated, joint fastener driving machines are made, enabling the company to meet practically every requirement for machines of this kind. In addition to the lines enumerated above, the extended experience of the Saranac Machine Company covers the manufacture of machines in many other lines, including machinery for packing cereals and other articles which can be packed in paper packages.

The Saranac Machine Company is a stock company, incorporated under

the laws of Michigan. The firm's policy is extremely progressive and it incorporates in its products the most advanced ideas. The company maintains a complete and competent engineering department for the designing of machinery, which department is always at the command of its customers.

The new company will handle both northern and southern hardwood lumber and will make a specialty of factory lumber.

The offices will be maintained at 814-15 Lumber Exchange building.

American Forestry Association to Visit Biltmore

Today, Mar. 25, the directors of the American Forestry Association will meet in their regular quarterly meeting at Asheville, N. C., adjacent to which is the famous forest estate of George W. Vanderbilt, widely known as the Biltmore estate. With the directors are a number of lumbermen, foresters, owners of timberland, and others interested in forest conservation. The party traveled in special cars on the Southern Railway, reaching Asheville this morning, and are quartered at the Hotel Langren. The afternoon of Mar. 25 is being devoted to a trip in carriages through that section of the Biltmore estate adjacent to Mr. Vanderbilt's famous mansion. C. J. Beadle, superintendent of the estate, is acting as escort to the party. This trip enables the visitors to make a study of the most advanced application of modern forestry to be found anywhere on the American continent. On the evening of Mar. 25 there will be a public meeting in the interest of forest conservation in the convention hall at the Hotel Langren. Dr. Henry S. Drinker, president of the association, and also president of Lehigh University, will talk on the question of forest taxation, of which he has made a special and exhaustive study. J. S. Holmes, secretary of the North Carolina State Forestry Association, will also address the guests at the banquet, as will J. E. Rhodes of Chicago, secretary of the National Lumber Manufacturers' Association.

On Mar. 26 the party will journey in automobiles as the guests of

Mr. Vanderbilt to Pisgah forest. This is the real forested section of Mr. Vanderbilt's estate. Here they will see what has been done in the primeval forests in the interests of forest conservation, close utilization and fire protection. Business sessions of the directors have been held en route on the trains.

First Log Cut at New Chicago Veneer Plant

On Monday, Mar. 24, the Fred W. Black Lumber Company opened up the first log cut at its splendid new veneer plant on Fortieth avenue near Twenty-second street. This plant has been in the course of construction for several months and is now pretty well shaped up in running order. Three veneer saws will be installed within a few days. The plant is equipped with a splendid line of appliances of the very highest design and quality. The plant is undoubtedly a model in design and provides for the maximum of light for working, and of comfort, cleanliness and efficiency.

The Fred W. Black Lumber Company has unloaded at its yard a splendid assortment of genuine African mahogany logs and, judging from the high character of the figure shown in the logs already opened up, a lot of the very best type of highly figured mahogany for piano and furniture manufacture is assured. In addition, a considerable quantity of selected white oak logs of Indiana growth has already been delivered and in fact the company now has sufficient logs on hand to run for a considerable time and has ample cargoes and carloads of both mahogany and oak en route.

Proposed Sale of Government Timber

Because of the proposed sale of the 260,000,000 feet of timber in the Priest River valley, Kaniku National Forest, Idaho, the government has prepared a prospectus covering this timber. This prospectus shows how the Forest Service furnishes information to lumbermen who might be interested in bidding on national forest timber.

An unusual feature of this sale is the fact that on part of the area the forest will be destroyed. The object will be to clear this area for agriculture instead of forest regeneration. Provision 8 of the timber sale contract and the privileges regarding agricultural land under the head "Rules for Marking and Process of Disposal" illustrates how this will be done.

When the area has been cleared of timber and the slash burned, the land will be opened to homesteading. If the Forest Service did not sell off the timber before opening the land to entry, the value of the present stand of timber would cause the land to be held speculatively, instead of being cleared for farms. But this land will be better employed growing farm crops than growing timber and hence the Forest Service is preparing to put it into the hands of bona fide settlers under a procedure which will insure agricultural development. The Federal government will receive about \$650,000 for the timber, of which \$225,000 will go to the benefit of the state for public schools and good roads. The maximum stumpage price of \$5.00 specified for the white pine on these logging chances is unusually high because this western white pine is the most valuable stumpage on the national forests.

The twelve per cent profit to the lumberman allowed for in calculating the stumpage rates to be charged is exclusive of interest on the investment, which is figured at six per cent. The minimum prices allow therefore for a profit of twelve per cent on each thousand feet of timber cut, over and above interest on capital and all overhead expenses. This is a smaller margin of profit than the Forest Service minimum prices usually reckon on logs, but competition for this timber is exceptionally keen. It is recognized that in general the manufacture of lumber is a business which, because of the risks involved, requires a high return in order to induce operators to undertake a logging enterprise.

For the Boss

Your men will show interest in you in the same proportion that you show interest in them. Also, never forget that they may know something that you do not know. Therefore, give them a willing ear, and due credit for what they do know.

Some employers never seem to differentiate between conceit and enthusiasm in their men. Some men are so enthusiastic about their work that they love to talk about it; and some employers, blind to their own interests, mistake it for conceit. That is why a good employee is sometimes lost in the scuffle.

Hardwood News Notes

< MISCELLANEOUS >

The Manufacturers' Lumber Company recently began business at Pittsburgh, Pa.

The Southern Lumber & Boom Company of Valley View, Ky., has gone out of business.

A. H. Richardson, Boston, Mass., has been succeeded by the A. H. Richardson Lumber Company.

The Michigan Handle Company has been incorporated at Brook Haven, Miss., with a capital of \$10,000.

The Little River Lumber Company has been incorporated at Caruthersville, Mo., with a capital of \$25,000.

The Athens Table & Manufacturing Company of Athens, Tenn., has reorganized, incorporated at \$50,000.

The Sumter Broom & Handle Company has been incorporated at Sumter, S. C., with a capital stock of \$25,000.

The Sidnaw Handle Company has been incorporated at Sidnaw, Mich., with an authorized capital of \$5,000.

The Thornhill Wagon Company of Lynchburg, Va., has increased its capital stock from \$300,000 to \$1,000,000.

The Otis Manufacturing Company of New Orleans, La., has increased its capital stock from \$200,000 to \$700,000.

The Standard Red Cedar Chest Company, Inc., Altavista, Va., has increased its capital from \$25,000 to \$100,000.

The Michigan Chair & Table Company recently began business at Lakeview, Mich. It will manufacture furniture.

The Western Grand Rapids Company has been incorporated at Albany, N. Y., with a capital of \$10,000, to manufacture furniture.

The El Dorado Manufacturing Company will erect a large plant for the manufacture of crates, boxes and baskets at El Dorado, Ark.

The Ypsilanti Furniture Company of Ionia, Mich., has recently suffered a loss of about \$265,000 by fire. The plant will be rebuilt.

The F. H. Smith Company of St. Louis, Mo., has been succeeded by the Smith-Sueme Lumber Company and will operate with a capital of \$25,000.

The lumber mill of Hare, Robinson & Hughes, Richmond, Va., was recently destroyed by fire of unknown origin. The loss was estimated at \$20,000, partly covered by insurance.

The Crawfordville Furniture & Lumber Company of Crawfordville, Ind., has been incorporated with a capital of \$75,000, to succeed the Montgomery Hardwood Lumber Company.

Messrs. James R. Andrews and J. A. McQuire of Marinette, Wis., have purchased a tract of 6,400 acres on Lake Superior, where they plan to erect a sawmill to be ready for operation next fall.

The Manchester Lumber Company is a new corporation at Manchester, Vt. The company, which is capitalized at \$50,000, will erect a sawmill, planing mill, novelty and hardwood flooring company.

Frederick S. Giddings, a pioneer hardwood lumberman, died recently at the home of his daughters, Mary and Helen Giddings of Cleveland, O. Mr. Giddings was eighty-one years of age and is survived by five children.

The Wolfe Lumber Company, McMinn county, Tennessee, has received its charter. The company is capitalized at \$10,000. The incorporators are M. E. Bryant, J. R. Wolfe, J. L. Ferguson, J. W. Brown and J. H. Dougherty.

The Midland Lumber Company of Minneapolis recently purchased from the North Star Lumber Company a line of lumber yards in eastern Minnesota and northwestern Wisconsin. The consideration is said to be about \$200,000.

The Monarch Lumber Company has been incorporated at St. Louis, Mo., with a capital stock of \$25,000, half paid. The incorporators are Frederick A. Goodrich, J. E. Crawford of Oklahoma City, J. A. Meyer, G. A. Hart and E. E. Hart.

The Scranton Road Lumber Company, Cleveland, O., which suffered loss by fire in November, is preparing to go out of business. The unburned lumber, together with the buildings and lease on the land, will be taken over by the C. H. Foote Lumber Company.

The wagon stock plant of the Clark-Gay Manufacturing Company of Little Rock, Ark., which burned last December, is now nearly reconstructed. The plant will probably be in operation the last of the month and is one of the largest and most costly hardwood plants in Arkansas.

The Hooton Hardwood Company, a branch of the R. A. Hooton Lumber Company of Terre Haute, Ind., will open offices in the Wright building, St. Louis, to manufacture and wholesale oak, cypress and ash. The president of the company is R. A. Hooton, Terre Haute; the vice-president, R. U. Fletcher, St. Louis.

A new corporation is the Preserved Tie Company of Kenova, W. Va., which will operate with a capital of \$150,000, dealing in lumber and timberlands and operating tie storage and treating plants and manufacturing cross-ties. The incorporators are G. A. Allen and J. B. Linn of Springfield, O.; Douglas W. Brown, M. S. Irons and Cary N. Davis of Huntington, W. Va.

The Oval Wood Dish Company, located at Traverse City, Mich., uses annually 7,000,000 feet of maple in the manufacture of wooden butter dishes. The wood is bought in the logs. The dishes are cut of steam-softened material by means of a scoop-like knife. Some, however, are made from flat veneer by fastening up the ends with wire. The daily shipments of the company average seven carloads. These go to all parts of the United States.

< CHICAGO >

J. A. Levings, president of the Moorhead Manufacturing Company, Moorhead, Miss., was in the city Monday, Mar. 24.

A. P. Bliss of Saginaw, Mich., of Bliss & Van Auken of that city, as well as of the Bliss-Cook Oak Company of Blissville, Ark., was a Chicago visitor last week, and while here placed an order with the Kraetzer

Company for one of its wood steaming preparaters for the oak flooring plant at Blissville.

C. L. Willey, the well-known veneer and mahogany man, was absent from the city for several days last week at Philadelphia, where he was called for a second time as a witness for the government in the case of an alleged misuse of the mails for fraudulent purposes against Messrs. Markley, Miller, Armstrong *et al* in connection with the redolent International Lumber & Development Company.

T. J. Peterson, prominent in Toledo lumber circles, was in town on March 20, where he met his wife, who was on her way home from a winter stay in San Diego, Cal.

James E. Dewey, sales manager of the Stearns Sait & Lumber Company of Ludington, Mich., was in the city several days last week, and favored **HARDWOOD RECORD** with a call on March 19.

H. F. Below, principal of the recently incorporated Below Lumber Company of Marshfield, Wis., was in town three or four days the latter part of last week.

J. B. White of the Missouri Lumber & Land Exchange Company of Kansas City, Mo., was in the city the early part of last week for a few days on business.

G. H. Holloway, president of the Holloway Hardwood Lumber Company, Great Northern building, Chicago, just returned from a two weeks' trip to southern mill points, getting mostly into Arkansas and adjacent territory.

Arthur Jarvis of the Steven & Jarvis Lumber Company, Eau Claire, Wis., was in town two days of last week on business in connection with that firm's interests.

R. H. Jones, secretary of the G. W. Jones Lumber Company of Appleton, Wis., stopped off at Chicago last week in conference with the local manager of that company, A. H. Ruth.

B. C. Tully of the Anderson-Tully Company of Memphis, Tenn., was in the city the most of last week on a business trip.

A. H. Ruth, local representative of the G. W. Jones Lumber Company, with offices in the Railway Exchange building, was recently unanimously appointed by the Supreme Nine of the Hoo-Hoo to complete the unexpired term of John Oxenford of Indianapolis in the capacity of Supreme Bojumn.

The Ouachita River Lumber Company has been incorporated at Chicago with a capital of \$30,000 to do a general lumber and milling business. The incorporators are E. Winters, J. H. Westover and John E. Waters.

J. E. Rhodes, secretary and manager of the National Lumber Manufacturers' Association, will return on March 30 from an extended trip which he has been making for several weeks in the interests of the association.

◀ NEW YORK ▶

A committee of the Lumber Trade Golf Association will meet in this city on Mar. 29, at which time definite plans for this year's play will be made. In all probability the tournament will be held on the links at Garden City, Long Island.

H. L. White of the White Lumber Company, Johnson City, Tenn., was a visitor in town recently.

Local wholesalers and representatives of coastwise steamship lines met recently and talked over the proposed abrogation of free lighterage privileges on lumber from southern ports. The dealers made a good case and the steamship men stated that they did not wish to do anything to injure the business. Final announcement will be made later.

A petition in bankruptcy filed against George Spaeth & Co., stair builders of New York, has been dismissed.

A petition in bankruptcy has been filed against the Abramson & Engesser Company, manufacturer of cabinet work, West Forty-Sixth street.

A voluntary petition in bankruptcy has been filed by Schildwachter Carriage Company, manufacturer of carriages and auto bodies, 1885 Park avenue.

The Nassau Milling Company has been incorporated at Hempstead, Long Island, with W. F. Hofstra, president and treasurer, and C. W. Brownson, vice-president and secretary. A modern planing mill equipped with eighteen machines and 150 h. p. boiler and 100 h. p. engine will be erected at Jackson street, Hempstead. Messrs. Hofstra and Brownson are well known in the trade of the Metropolitan district and Long Island.

Robert Elliott, president of the Standard Dry Kiln Company of Indianapolis, spent a few days in New York following the inaugural ceremonies which he witnessed at Washington.

Another machinery trade visitor to New York recently was W. P. Powell, representing Wm. B. Mershon & Co., band resaw makers of Saginaw.

◀ BUFFALO ▶

One of the chief committees of the Chamber of Commerce is the entertainment committee and it usually has among its members representatives of the hardwood trade. This year President Meldrum has appointed on this committee A. W. Kreinheder and I. N. Stewart.

F. T. Sullivan is making plans for the receipt of a large amount of lake lumber this season and the boats of H. H. Salmon & Co. are now being put in shape for their first trips.

W. K. Jackson of Jackson & Tindle returned a few days ago from a trip to Panama. He was a member of a party spending several weeks in a visit to the isthmus and other countries.

Anthony Miller reports an improvement in the demand for a number

of hardwoods. He expects to make large shipments from the South soon, particularly in ash and basswood.

Blakeslee, Perrin & Darling are receiving stock from several southern mills and have been very busy of late in piling up stock in yard. Everything is reported in pretty good demand.

The National Lumber Company has arranged for the receipt of a large stock of lake hardwoods this summer, especially in birch and maple, in which trade is reported very good.

O. E. Yeager is back from an enjoyable trip to Mt. Clemens, Mich. He reports a very fair inquiry for different hardwoods, with plain oak leading and quartered doing a little better than formerly.

G. Elias & Bro. are looking for an active building season here this spring. The firm is getting a good share of the business in hardwood fittings for some of the big office structures.

Roy O. Sykes, son of President W. L. Sykes of the Emporium Lumber Company, is to be married on Mar. 26 to Miss Laura K. Scott of Syracuse at the home of the bride's parents, Mr. and Mrs. Edwin J. Scott.

The unloading committee of the Buffalo Lumber Exchange has been appointed by President A. W. Kreinheder as follows: H. I. George, chairman; John McLeod, W. P. Betts, B. H. Hurd, S. G. Taylor and H. E. Montgomery. All are lake shippers of lumber.

The Chautauqua Panel & Veneer Company has been organized at Jamestown with a capital stock of \$125,000 and will manufacture and deal in veneers for furniture making. The directors are the Setter Brothers, recently in this line at Cattaraugus, and John N. Chappel, Frank H. Mott and Louis L. Ostrander. The furniture factories of Jamestown have plenty of business on hand at present and are frequently obliged to work overtime.

The Medina Wood Working Furniture Company has been organized at Medina, N. Y., with Carl H. Breed, for many years member of the hardware firm of Chase & Breed as president. J. William Jackson, vice-president, was formerly connected with the Maher Brothers Company, manufacturer of furniture.

◀ PHILADELPHIA ▶

Frederick S. Underhill of Wistar, Underhill & Nixon is not disposed to quarrel with trade conditions. He says the buying is in spots, slow in large cities, but the totality satisfactory. The hardwood situation is strong and prices are well maintained. After a four weeks' stay in Sumter, S. C., looking after the firm's interests, R. W. Wistar is on his way home. He will put in a few days at Pinchurst, N. C., where he will indulge in golfing, his favorite sport.

J. W. Floyd of the Floyd-Olmstead Company reports a little slowing up in some lines, but the general situation gives satisfaction, and the outlook is favorable.

Charles Atherton of Charles Atherton & Co. reports steady trading, with a noticeable advancement as the spring season opens.

J. T. Fentress of the Surry Lumber Company, Baltimore, Md., and Brooks Flowers, of the Flowers Lumber Company, Jakin, Ga., were among the recent visitors to the local trade.

Maurice W. Wiley, formerly associated with the Wiley-Harker Lumber Company, of Baltimore, has connected himself with Thomas E. Coale Lumber Company in the capacity of manager of the yellow and North Carolina pine departments.

E. M. Bechtel, sales manager of William Whitmer & Sons, says business gives no cause for complaint,—no difficulty in disposing of good stock and at strong prices. Everything indicates a good year's trading.

Fire recently destroyed the factory of the Shreve Chair Company, Union City, Pa., with an estimated loss of \$250,000.

The Pocahontas Coal and Timber Company, Wilmington, Del., was chartered under Delaware laws, Mar. 17, with a capital of \$500,000.

◀ BOSTON ▶

B. D. Peterson, Jr., a dealer in cypress and other building lumber, with an office at 15 Federal street, Boston, has left Boston without letting any of his friends know where he has gone. The sudden disappearance has caused great surprise among lumber dealers in this city as they have always thought that he was doing a fine business. So far as is known no steps have been taken to incur expense to either his estate or his creditors owing to the fact that the assets are practically nothing. A clerk in his employ states that the liabilities will be about \$65,000 to \$70,000. His office is now closed.

The hearings at the State House, Boston, on the fire hazard bills were held early this month. The Massachusetts Wholesale Lumber Association and the Lumber Trade Club of Boston were represented by Arthur S. Whalen. He favored a permanent fire hazard commission. In reference to the bill, which was introduced with the idea of prohibiting the use of wooden shingles within the city limits, Mr. Whalen felt that the subject should be given further study and that it should be referred to a permanent metropolitan fire commission. A bill prohibiting the use of wooden shingles would work a hardship to manufacturers and dealers in lumber.

The long established business of the L. T. Robbins Lumber Company, Plymouth, Mass., has been sold to Swain & Boggs, wholesale dealers, Boston. The Robbins business was established many years ago by the late Leavitt T. Robbins.

◀ BALTIMORE ▶

A special committee of the National Lumber Exporters' Association appointed by President Frank Fee recently framed and adopted resolutions on the death of Frank F. Abbott, vice-president of the Penrod-Abbott Lumber Company of Bradford, Ark.

Howard W. Jackson and Lee I. Hecht were appointed receivers for the Chas. J. S. Steiner Mantel Company of Orangeville, Baltimore county, on Mar. 10, by Judge Duncan, in the circuit court at Towson. The receivership was decreed on the application of Mr. Jackson and was assented to by the company and Sady Salebes. It was contended in the petition that irreconcilable differences had arisen between the officers, directors and stockholders of the company in regard to a proposed reorganization, and that the interests of all parties would be conserved by a receivership. The assets were given as \$65,000 and the liabilities as \$36,000. The company was formed years ago by Charles J. S. Steiner, who was formerly with the Steiner Mantel Company, which operates a plant at Highlandtown and is not in any way connected with the corporation in financial difficulties.

A formal hearing of the case of Robert McLean, the hardwood exporter, who had petitioned the United States Court here for the benefit of the bankruptcy laws, was held before Thomas Foley Hiskey, acting as referee, the statement as to assets and liabilities as well as other matters being sworn to and certified to the court. Mr. McLean, as announced at the time, placed his liabilities at \$66,699.86 and his assets at \$19,465.72.

Mr. Collins, a young man who has been with Robert McLean for a number of years, has established connection with several hardwood mills and is selling lumber here on commission.

David T. Carter of the hardwood firm of David T. Carter & Co., Calvert building, will leave next week for Tennessee and southwestern Virginia in search of stocks, which are in very urgent demand. He will be away about ten days and expects to take in a considerable number of mills, but is by no means sanguine of getting what he wants, the offerings being small and the inquiry very active.

The new mill of the R. E. Wood Lumber Company at Fontana, Swain county, has been running about ten days now, but has not yet been speeded up to its normal capacity nor has it been running full time. The plant, which is of frame, on a concrete foundation, is regarded as one of the best and most efficient in that section of the country.

Paul Littig, a young Baltimorean, who was formerly with the Stirling-West Company, a corporation that liquidated shortly after the big fire, and who is now in the wholesale hardwood business at Roanoke, Va., was in Baltimore last week and called on a number of his old acquaintances. He spoke very encouragingly on the general state of the trade and his own business in particular.

Among other visiting hardwood men during the past week were H. L. Bonham, a millman of Chilhowie, Va., and F. X. Diebold of the Forest Lumber Company of Philadelphia. Both stated that stocks are very small and that prices are either firm or higher in consequence of the urgent demand.

◀ COLUMBUS ▶

Building operations during the month of February showed a marked increase over February of 1912 according to the recent report of the building inspector. During the month of February, 1913, building operations aggregated \$225,980 as compared with \$210,251 in the same month of the previous year. Since Jan. 1 the value of new buildings projected amounts to \$434,225 as compared with \$310,251 for the corresponding period in 1912, a net gain of thirty-nine per cent. Warm weather has been responsible in a large measure for the increase. Architects and contractors are waiting for plans which will be started as soon as spring appears.

C. H. Weedon, Detroit sales agent for the W. M. Ritter Lumber Company, visited the Columbus offices recently. J. W. Mayhew, general sales manager for the same company, has returned from a two weeks' inspection trip of the mills throughout the South.

A bill to exempt woodlands from taxation has been introduced in the Ohio legislature by Representative Bayer and is intended to stimulate forestry. The bill provides that land owners after having planted trees no less than 170 per acre can have the land placed on the tax duplicate at a nominal valuation of \$1 per acre. There is some chance of the bill becoming a law.

The Theisen-Hildred Company of Napoleon, O., has been incorporated with a capital stock of \$20,000 to operate a saw and planing mill and deal in lumber. The incorporators are Albert S. Theisen, George E. Hildred, Fred C. Hildred, John Theisen, Nettie Corbett and Herbert H. Hildred.

The Portage Lumber Company has filed papers with the secretary of state increasing its capital stock from \$30,000 to \$50,000 and at the same time changing its name to the Honing Lumber Company. The concern is located at Ravenna, O.

The Fremont Lumber & Supply Company has about completed the work on the former building of the Fremont Furniture Company and several

of the departments of the lumber company are being operated. The move was made to increase the facilities of the concern.

F. B. Pryor of the sales department of the W. M. Ritter Lumber Company reports a good demand for all varieties of hardwoods with prices ruling strong. He says the movement is well divided among all the grades with the result that there is no accumulation in any place. Chestnut is in good demand and prices are high. Buying is pretty equally divided among retailers and factories.

W. B. Sissons, sales manager for the Sowers-Leach Lumber Company, has returned from a buying trip in the South. He says the demand for hardwoods is good, with stocks fairly scarce and prices remaining strong. J. J. Wyatt, the Detroit representative of the Sowers-Leach Lumber Company, has resigned his position.

L. B. Schneider, sales manager for John R. Gobey & Co., says the market is about the same, with strength shown in every variety of hardwood. There is no weakening in prices and the larger volume of business is expected as soon as the weather improves.

W. L. Whitacre of the Whitacre Lumber Company says there is a fair demand for hardwoods, with prices strong. D. W. Kerr of this company recently left for a business trip in the South.

Ray Lovell of the Reliance Lumber & Manufacturing Company says prices are good and there is a good demand for hardwoods, with shipments coming along better.

◀ TOLEDO ▶

"Business has been fair with us" was the report from the Toledo Bending Company, manufacturer of carriage woodwork. "The demand is not yet up to the standard hoped for, but I believe that this coming season is going to be a good one for us. We received a considerable set-back from the automobile industry but each coming season strengthens the belief that the automobile cannot put the horse out of business. It is a well known fact that horses cost more now than ever before and can be readily sold at fabulous prices if the stock is right. Carriages and wagons are still in large demand and I believe will be better than for a long time past as soon as the season really opens up. We have had no difficulty in securing stock and have been able to secure our supplies at a reasonable figure." This concern sent out a new price list the first of the year which showed a ten and fifteen per cent increase in certain articles, such as shafts, spokes and bows, but for the most part prices are the same as last season.

W. S. Booth of the Booth Column Company is making a trip through eastern Ohio in the interest of his company, this week.

The J. M. Skinner Bending Company, reports business fine with plenty of raw materials on hand and a good line of orders. The only complaint is that prices on products are lower than they should be.

Records in the office of the building inspector show that Toledo has gained seventy-one per cent during February, 1913, over the same month last year. Permits were issued for 101 buildings at an estimated cost of \$406,280 as compared with forty-two permits for February, 1912, at an estimated cost of \$236,917.

◀ INDIANAPOLIS ▶

The plant of the T. B. Laycock Manufacturing Company, bed manufacturer, has been sold for \$307,025.47 to the general creditors, who will operate the plant.

B. G. B. Slaymaker has been appointed receiver for the American Pipe Organ Company, Anderson, on application of the American Rotary Valve Company, creditor to the amount of \$150.

John J. Madden has bought a manufacturing plant at Sherman Drive and Sixteenth street for \$38,000 and will manufacture davenport, employing 150 people. The plant will be in operation in three months.

Caleb S. Eaglesfield, president of the Eaglesfield Stewart Company, manufacturer of hardwood flooring, has been appointed receiver in the United States Court for the Roach-Brown Manufacturing Company, manufacturer of tables and kitchen cabinets. Action to have the receiver appointed was brought by E. C. Atkins & Co. and other creditors.

With an authorized capitalization of \$5,000, the West Side Mill & Lumber Company has been organized and incorporated at Clay City to operate a sawmill and conduct a general lumber business. Those interested in the company are Frank K. Sipple, Claud Williams, William Dickey, Orville Dickey and Thomas Flynn.

The McIlvaine Lumber Company of Vincennes has filed notice with the secretary of state that it has increased its capitalization by a \$20,000 issue of preferred stock.

Clothes racks and hardwood novelties will be made by the Schoentrup-Worden Rack Company, just organized at Shelbyville by Joseph B. Schoentrup, George Worden and Harry Minster. The company has been incorporated with an authorized capitalization of \$5,000.

◀ MEMPHIS ▶

Weather conditions in this territory during the past fortnight have been generally favorable for work in the woods and as a consequence the amount of timber brought out has been considerably above the average. During February the Valley Log Loading Company prepared 1306 cars for shipment to Memphis and other points on the Yazoo & Mississippi

Valley line of the Illinois Central railroad and officials of that company say that this not only represents a large increase over last year but that the amount of logs loaded since the first of March also shows a decided gain. The company is doing everything it can to get timber loaded for its clients but is meeting with much difficulty on account of the shortage of equipment. It says that it is impossible to secure enough cars or motive power with which to handle shipments promptly.

The amount of timber being received over the other lines entering Memphis is also quite full. There are also some logs reaching Memphis by water. The recent stage of the Mississippi river has been quite satisfactory for handling timber and those who had logs scattered by the high water have, wherever possible, collected these and brought them to the mills at Memphis or at other points along this stream. Practically all of the mills here are well supplied with timber for the immediate future and the openness of the weather makes the outlook reasonably good for an adequate stock of logs.

Conditions in this respect are in very striking contrast with last year when the unprecedented rise in the Mississippi and its tributaries began. Readers of the **HARDWOOD RECORD** are familiar with the fact that the stage went practically ten feet above the danger line here and that it was out of the question to operate many of the mills in the Mississippi valley and that there was so much water in the low lands that logging was impossible. In fact nearly all the plants at Memphis found it necessary to close down, and the same was true of the majority of those at the principal points in the valley south of Memphis. This year they are all running on full time and there is a plentiful supply of timber. It is officially predicted today that the Mississippi will go to a stage of thirty-feet within the next fortnight but this is not causing any alarm as a stage of thirty feet is still five feet below the danger line and some fifteen feet below the record stage of 1912. There will be no overflow with such a volume of water and the outlook from the standpoint of hardwood lumber manufacturers is regarded as quite favorable.

The capacity of the plant of J. W. Wheeler & Co., Madison, Ark., has been materially increased through the installation of a resaw. The daily cut now is about 55,000 feet. The resaw has just been placed in operation. The company has also increased its boiler power and otherwise improved its plant. C. L. Wheeler, general manager of the company, was in Memphis this week and said that he considered the outlook exceptionally good. The firm has a plentiful supply of timber on hand.

The Memphis Band Mill Company has made application for a charter under the laws of this state. The capital stock is \$100,000. The new company has taken over the plant of the Memphis Saw Mill Company and is in effect a successor to that corporation. The principal incorporators are: J. F. McSweyn, O. A. Filger, George McSweyn, K. L. Emmons and A. B. Baker. J. F. McSweyn has been in charge of operations for the Memphis Saw Mill Company here for some years. W. O. Hughart and George T. Kendall of Grand Rapids were the principal owners of the Memphis Saw Mill Company.

S. B. Anderson, president of the Anderson-Tully Company, W. A. May of May Brothers, W. A. Ransom of the Gayoso Lumber Company, and Mark H. Brown of the Mark H. Brown Lumber Company have returned from the tour of Central America and Panama which was made in conjunction with the party from the Business Men's Club. They report that the trip was one of the most enjoyable they have ever made and they were quite enthusiastic over the splendid treatment accorded them by the management of the excursion. They are also of the opinion that the Panama canal will open up a very large business between Memphis and points which will be more easily reached by virtue of the canal. They think that there is a splendid chance to build up profitable trade relations with the people of Central America, and some of them are disposed to take time by the forelock and begin preliminary preparations for the enjoyment of such business.

The Columbia Land & Timber Company has been organized at Stephens, Ark. The capital stock is \$200,000. J. F. Halton is president and L. L. Tidwell, cashier of the bank of Stephens, is secretary and treasurer. The company has recently purchased extensive timber land holdings in Louisiana and will establish a mill and other facilities for the development thereof.

F. B. Robertson, sales manager of the lumber department of the Anderson-Tully Company, and C. B. Dudley of the Dudley Lumber Company, have returned from the annual of the National Wholesale Lumber Dealers' Association, at Atlantic City. Mr. Robertson was signally honored by his election as trustee. The Memphis delegation carried an invitation to the association to hold its next annual in Memphis. This will be decided by the trustees at a later date.

J. W. Dickson, president of the Valley Log Loading Company, is able to be out again. His ankle, which was broken some weeks ago, is not entirely well but his many friends are congratulating him upon the fact that he is able to be at his office.

Among the recent visitors to Memphis has been Earl Palmer of the Palmer-Ferguson Company, Paducah, Ky. He was en route to New Houka, Miss., to look after plans for the installation of a mill at that point for the development of the timber on 10,000 acres of timberland owned by his firm. New Houka is on the New Orleans, Mobile & Chicago but it will be necessary for the company to build about ten miles of railroad to facilitate the handling of the timber to be developed. A large band mill is to be established. The site for this has already been se-

lected and the machinery has been ordered. It is expected that it will be in operation within the next three months. The company considered the proposition of carrying this timber to Paducah but decided that it would be more profitable to establish a mill closer to the base of supply.

F. E. Gary, general manager of the Baker Lumber Company, Turrell, Ark., has returned from a trip to Panama and Central American points. He was accompanied by his wife and friends from the North.

James E. Stark of James E. Stark & Co., is back from a visit to points in Florida. He was accompanied by his mother and one of his children. He is looking remarkably well. He was quite busy before he left with the problem of securing lower rates on insurance for the lumber companies and, on his return yesterday, he held a conference with Commissioner Dies on this subject and promises to be quite active in this matter.

The Anderson-Tully Company has resumed operation of its box factory at Vicksburg after a suspension covering some time. The company found it impossible to secure enough dry cottonwood to keep its box factory in steady operation and it closed the latter down until it had a large enough supply of dry stock to enable it to continue without interruption. The company, however, is operating its box factory here on full time and the allied plant at Madison, Ark., owned by the Morgan-West Company is also being run steadily.

◀ NASHVILLE ▶

The local furniture industry has showed a decided growth for some months past. The Standard Furniture Company, one of the largest concerns of the kind here, has prepared for a twenty-five per cent increase in its production and has installed the necessary machinery. The company is making about three carloads of furniture daily.

Forest fires, fanned by hard winds, have done considerable damage recently in the vicinity of Clarksville, Tenn. It is suspected they were started by some lawless person or persons. Fencing, timber and other property was destroyed but no buildings are reported to have been burned.

D. B. Clayton is forming a company which will bear his name to operate an extensive lumber plant at Lewisburg, Tenn.

For a consideration of about \$6,000, the Beaver Dam Manufacturing Company of Damascus, Va., has purchased the plant of the Wilkerson-Matthews Lumber Company at a bankrupt sale. The estimated value of the plant is placed at \$30,000. The new owners will operate the plant just bought.

◀ BRISTOL ▶

The sale of the plant of the J. A. Wilkinson Lumber Company, Inc., of this city to Stone-Huling Lumber Company, at \$16,200, was this week confirmed by the creditors at a meeting before H. H. Shelton, referee in bankruptcy. The price is a very low one, but the creditors decided to accept it. The new company will install new machinery and operate the plant on a larger scale. The yard site is included in the purchase. The creditors confirmed the sale of other real estate and personal property, but declined to accept a bid of the Ellis & Myers Lumber Company, of Salem, Va., for the dismantled band mill.

The creditors are ready to declare a dividend as soon as the referee passes on the contested claim of Price & Price, Ltd., of London, the amount of which is \$43,000. It is contended that this is a personal obligation of J. A. Wilkinson and that the corporation wrongfully undertook to assume it. A \$5,000 claim of a Bristol bank is being fought on the same ground.

George M. Speigle was here last week from Philadelphia to bid on the Wilkinson plant.

George H. Mell of Kane, Pa., who operates in western North Carolina, was a visitor this week on the Bristol market.

Price & Pierce, Ltd., of London, are preparing to open an office in Bristol, in charge of J. A. Wilkinson, who is looking after the firm's extensive business in this territory.

The work of extending the Virginia-Carolina railroad to Wilkesboro, N. C., is now under way and is being pushed. The extension will result in the installation of several new mills.

The Bristol Planing Mill has established a mill in the Holston mountains east of Bristol and is cutting a good sized area of timber.

L. D. Gasteiger, manager of the Pittsburgh Lumber Company, was a visitor here this week. The company has a large mill at Hampton, Tenn., thirty miles south of Bristol. Senator "Bill" Flynn, the well-known political leader, is at the head of the company.

The Tug Fork Lumber Company is preparing to install a new mill near Welch, W. Va. The company was formed only a few weeks ago.

The band mill of the Peter-McCain Lumber Company in this city is closed for a short time in order to permit the installation of new machinery. The planing mill is running.

◀ LOUISVILLE ▶

Lumbermen will be interested in the hearing to be held in this city in the near future, when the Interstate Commerce Commission takes evidence on the switching case in which the Louisville & Nashville is the defendant and the Board of Trade the complainant. The Louisville &

Nashville filed its answer recently, contending that the commission had no jurisdiction over its industrial switches and that its rules were all right anyway. Lumbermen would be very much pleased to see an open-door policy laid down by the commission, although most of them have become so accustomed to the methods of the Louisville & Nashville in enforcing its "whole hog or none" ideas that they are accepted now as a matter of course.

While no decision on the project has been reached, it is possible that the Louisville Point Lumber Company will expand its operations by locating a sawmill in Arkansas. President Edward S. Shippen recently returned from the southwestern state after looking over a tract of timber which had been called to his attention. A decision one way or the other will probably be made in the near future. In case a mill is put up, most of the machinery formerly used by the Boone Lumber Company at Ford, Ky., will probably be utilized.

Friends of T. M. and J. G. Brown of the W. P. Brown & Sons Lumber

Kentucky Lumber Company

MANUFACTURERS

POPLAR, PLAIN AND QUARTERED OAK, RED AND SAP GUM, ASH, CHESTNUT, BASSWOOD, HEMLOCK, WHITE PINE

Mills at
Burnside, Ky. Williamsburg, Ky.
Isola, Miss.

Sales Office
Cincinnati, O.

CINCINNATI

Hardwood Manufacturers and Jobbers

Johns, Mowbray, Nelson Company
OAK, ASH, POPLAR & CHESTNUT
GUM AND COTTONWOOD

C. CRANE & CO.
MANUFACTURERS HARDWOOD LUMBER
1739 EASTERN AVENUE

CONASAUGA LUMBER CO.
MANUFACTURERS HARDWOOD AND PINE
FOURTH NATIONAL BANK BUILDING

ARE YOU ALIVE

to the "Service" (in all its details) you can secure from us on Oak, Gum, Poplar and other Hardwoods?

BETTER GET IN TOUCH WITH US

THE M. B. FARRIN LUMBER CO.

Richey, Halsted & Quick
HIGH GRADE SOUTHERN LUMBER

E. C. BRADLEY LUMBER CO.
HIGH GRADE WEST VIRGINA HARDWOODS
GOERKE BUILDING

Company, think that they have a great proposition in the timber tract in Arkansas formerly owned by the Robe Lake Lumber Company and now the property of the Brown Brothers Lumber & Land Company. There is no intention of operating it in the near future, but it will be held for investment purposes.

Mills affected by the transit arrangements of the Louisville & Nashville are furnishing reports of the inbound log shipments and outbound lumber shipments in accordance with the tariff requirements of the road, the Southern Weighing & Inspection Bureau looking after this detail. However, the reports are now not required to be made daily, which is some help. The Louisville & Nashville has not yet changed its rules regarding substitution, but is still requiring oak for oak and ash for ash, although the Interstate Commerce Commission has stated that hardwoods for hardwoods would be an acceptable basis of providing substitution of tonnage.

Inasmuch as several local veneer mills manufacture poplar crossbanding, there was considerable interest in a conference of poplar men held at the Seelbach hotel here a few weeks ago. There was no definite object of the meeting except to talk over conditions in the trade, the feature of the situation developing in the high price of logs. It is said that for good logs suitable for veneer manufacture the highest prices in the history of the business are being paid, and that accordingly present veneer prices are out of line with the cost of production.

J. W. Park of the Elkton, W. Va., Box Company, which is one of the largest consumers of hardwoods in the package business, using about 10,000,000 feet of low-grade oak a year in the manufacture of crates for the tinplate mills, was in Louisville recently. He has a theory that too much value is being placed upon low-grade oak and not enough on the upper grades; and while he leans in the direction of cheap cull oak by reason of his position as lumber buyer for his concern, he has some good arguments in favor of his theory.

The use of the river in the transportation of forest products is being accentuated by a move of the Big Four railroad, which has acquired 400 acres of land at Brookport, Ill., opposite Paducah, Ky., and will receive barges of ties brought up the Ohio river and transferred at Brookport to the cars. The development of the river traffic through the completion of the improvement of the Ohio and the opening of the Panama canal is declared by experts to be a certainty.

J. E. Barton, state forester of Kentucky, has succeeded in getting strong sentiment stirred up in favor of the organization of a state forestry association. The idea was broached by him in a recent address in Louisville, and will be carried out, it is expected, at a meeting of the Kentucky Educational Association in Louisville, April 30. Mr. Barton and the state board of forestry are now completing arrangements for the establishment of a nursery at Frankfort. Another will be located in Louisville.

C. M. Sears of the Edward L. Davis Lumber Company, who is one of the closest observers of business conditions in the local hardwood trade, is convinced from an investigation of conditions in the furniture business that the factories in that line are going to have a big year. Most of them are buying freely and appear to be turning out goods at an unusually rapid rate.

W. P. Bolton, formerly in charge of the wholesale department of the W. P. Brown & Sons Lumber Company, and now conducting a lumber business with offices in the Peoples Gas building, Chicago, was in Louisville recently and attended a meeting of the Louisville Hardwood Club, which welcomed him as an old friend. Mr. Bolton reported conditions in the Windy City trade to be good.

Most of the Kentucky river sawmills now have enough logs on hand to insure a pretty steady run through the summer, the stream and its tributaries having offered a logging stage for several weeks, and this has been taken full advantage of.

The C. C. Mengel & Brother Company recently received the last lot of African mahogany logs which will be available until midsummer, when the results of the spring rains will be developed in the form of shipments from Axim. The company has a big supply of logs on hand at present and is cutting them up as fast as possible. Plans for its new mill are now in process of development.

← MILWAUKEE →

A thousand acre tract of hardwood timber land in Menominee county in the vicinity of Wausaukee will probably be taken over by Missouri parties, who have secured an option through Wausaukee agents. If the deal is consummated, a mill will be established on the tract, the timber cut and sawed into lumber. T. H. Marrow and Oliver Harmon of Clarence, Mo., are the holders of the option. They expect to ship the lumber into their state, where they operate yards.

The Burdick Cabinet Company has been incorporated with a capital stock of \$150,000 at Milton. Paul M. Green, B. H. Wells, T. A. Saunders, and J. G. Carr of Milton, Dr. A. S. Maxson and Prof. Allen B. West of Milton Junction are the incorporators. A factory employing thirty to fifty men will be erected between the two villages to manufacture the products of the concern.

A fire in the drykilo and wood mill of Charles Scholz, at 740 Twentieth street, Milwaukee, recently caused a damage of \$700.

Logging camps are breaking up early this spring, due to the mild weather, those camps which have long hauls being most affected by the

thaw. Unless a sudden change comes shortly, there will be little more logging this season, although logging operations have been more extensive this year than for many years past. The reason for this activity was good prices of lumber and many camps were operating that had been closed for several years. The extensive operations resulted in a shortage of help and consequently unprecedented prices for labor.

A new refrigerator, composed of an inner and outer shell of five layers of veneer each, and separated by three sheets of asbestos and two airtight spaces, is being manufactured by the Wisconsin Seating Company of New London. The interior of the refrigerator is covered with white enamel and the corners are readily accessible for cleaning, making it absolutely sanitary.

The Bartlett & Wagner Lumber Company has been formed by Wm. Bartlett, for several years owner and operator of the Clark mill in Bloomfield, and J. H. Wagner, of the J. H. Wagner Lumber Company. Mr. Bartlett has acquired the interest of A. Looker in the saw and planing mill and lumber yards of the last named company, and the new concern was formed.

The N. S. Washburn Lumber Company of Sturgeon Bay started up both the planing and sawmill for a 350,000 foot run. The sawmill will finish sawing the logs and then shut down, but the planing mill will run until late in the fall. The concern is looking forward to a good season, having already booked a large number of good orders.

The John Week Lumber Company of Stevens Point has installed a new "dutch oven" in the boiler room and has started the sawmill for its season's run. A machine for converting refuse into fuel has also been installed.

The Commercial Club of Chippewa Falls is making an effort to re-open the plant of the Stanley Manufacturing Company, which has been idle since the death of C. A. Stanley, the founder. The plant is equipped with woodwork manufacturing machinery.

A new steam drier has been installed in the plant of the Wisconsin Seating Company, New London, which makes a great improvement to the plant. With the new machine, the time between the cutting of veneer and its use in manufacturing has been shortened by several days. Instead of taking the freshly cut veneer to the dry-kiln for several days, it is now dried without handling and then taken directly to machines to be worked up into the finished product.

Courtland M. Conlee, a pioneer of the early lumber industry of Oshkosh, having been actively engaged in the lumber business with the Conlee Lumber Company, has died at his home in the state of Washington. The remains were taken to Oshkosh for burial.

Robert B. Blackburn, the oldest son of Mr. and Mrs. Robert Blackburn, recently died at Stevens Point. The father is a wholesale lumberman of Milwaukee, where the body was sent for burial.

Mrs. Margaretha Schroeder, widow of John Schroeder, the founder of the John Schroeder Lumber Company of Milwaukee, recently died at the age of seventy-two years. Mrs. Schroeder was born in Hanover, Germany, and has resided in Milwaukee since 1845. Her husband, John Schroeder, died about four years ago.

The daughters of the late Edward Bradley, pioneer lumberman who died last December, leaving an estate of \$3,600,000, have donated a memorial fund to the St. Paul's Episcopal church in Milwaukee, as a memorial to their deceased mother and father. The fund will be known as the "Edward and Alice Hall Bradley fund" and is the gift of Mrs. Robert B. Tweedy and Mrs. Spencer Illsley. It will be devoted to the support of a visiting housekeeper to work among the poor of the city.

The Hardwood Market

< CHICAGO >

Some little complaint has been noted during the past few weeks that the local trade is not as brisk as it has been. It is, however, a significant fact that since the beginning of 1913 each month and each fortnight has experienced a greater volume of trade in lumber products, and at a greater price, than during the corresponding periods for 1912. It would seem, then, that in view of the satisfactory demand on the part of the factory trade, and falling off on the part of the trade immediately dependent upon building operations is caused by seasonal reasons, at least in part. Through the influence of a rather uncertain opening of spring, in addition to the high cost of all raw materials entering into house construction, the building season locally has not opened up as satisfactorily as had been anticipated. As a consequence, the planing mill trade is not unusually active.

Notwithstanding this present condition, however, there is absolutely no apprehension, nor is there any expression of pessimism on the part of the local trade. Values are being maintained healthfully, with some items slowly increasing, but most of them holding a reasonable level.

No change is seen in the stock conditions, although local buyers anticipate that they will have considerable dry northern stock in the near future. The relative position of the various woods remains about as it has been for several months, with oak, ash, maple and chestnut the leading items.

< NEW YORK >

The New York hardwood market shows no change in the past two weeks. The retail trade shows some decrease in demand and volume but there is no falling off in prices. Collections are a bit slow but most of the business going is generally satisfactory with every indication of greater activity. The wholesale market is strong and shows no signs of weakening. Those woods which have led the list continue in good demand and strong in price. Oak is the leader with ash and chestnut well up. Good lumber finds a ready sale and lower grades are moving in good volume.

< BUFFALO >

There is a satisfactory business in hardwoods, with a brisk inquiry for quite a number of different woods. The report coming from the furniture factories is very favorable and they have so much business

The Tegge Lumber Co.

High Grade
Northern and Southern
Hardwoods and Mahogany

Specialties
OAK, MAPLE, CYPRESS, POPLAR
Milwaukee, Wisconsin

CINCINNATI

Hardwood Manufacturers and Jobbers

GEORGE LITTLEFORD

RED CEDAR, CHERRY
OFFICE: 1263 RICHMOND STREET

SWANN-DAY LUMBER CO.

Mfrs. YELLOW POPLAR and WHITE OAK
SALES OFFICE—SECOND NATIONAL BANK BUILDING

SHAWNEE LUMBER CO.

HARDWOODS, WHITE PINE and HEMLOCK
Sales Office—South Side Station—C. H. & D. R. R.

RIEMEIER LUMBER CO.

OAK, POPLAR, CHESTNUT
SUMMERS AND GEST STREETS

JAMES KENNEDY & CO., Ltd.

OAK, POPLAR AND OTHER HARDWOODS
FIRST NATIONAL BANK BUILDING

The Kosse, Shoe & Schleyer Co.

WALNUT, OAK, AND OTHER HARDWOODS
103-4-5 CAREW BUILDING

OHIO VENEER COMPANY

Manufacturers & Importers FOREIGN VENEERS
2624-34 COLERAIN AVENUE

CHARLES F. SHIELS & CO.

SPECIALISTS IN WIDE STOCK
POPLAR, OAK, CHERRY, BIRCH

Kraetzer-cure LUMBER

in net results means

Better Lumber Quicker Time Lower Cost

¶ The only difference between a groove and a grave is a matter of depth.

¶ Keeping out of the groove commercially means keeping out of the grave.

¶ Just because grandfather didn't know how to season lumber quickly, accurately and cheaply is no reason you should continue to employ his system.

¶ In higher quality of product and lower cost we can save you from \$3 to \$4 on every thousand feet of lumber you produce.

¶ Let us tell you about the KRAETZER STEAM CYLINDER PREPARATOR, and send you a list of all users, to every one of whom we confidently can refer you for endorsement of the system.

The Kraetzer Company
537 South Dearborn Street
CHICAGO, ILL.

Kraetzer-cure LUMBER

on hand that many of them find it necessary to run overtime. Conditions in the different industries calling for hardwood stocks are such as to indicate that the present year is likely to be a prosperous one for the lumbermen. Prices hold firm and in some varieties are strong. Dealers who handle lake stocks are looking forward to an active season in the way of receipts from that direction.

Plain oak has been about the best seller, and the scarcity of stock has kept prices stiff. There has been an active demand for this wood for some time, and dealers could have turned over quite an amount in excess of their sales if they had had the lumber. Ash also has been in active demand, while birch and maple have been doing well, and flooring has been commanding high prices. Poplar and basswood have been selling at a good rate and are holding firm.

◀ PHILADELPHIA ▶

The hardwood situation remains unchanged from that of a fortnight ago. The buying market continues strong and prices are well sustained. A vigorous activity is noticeable in building work of all kinds with the early advent of spring weather. The wholesale consuming industries are buying freely and the railroads are contemplating extensive improvements in the near future, which promises well for an increased prosperity. Stocks at mill ends, especially in hardwood centers, are far from accumulating, and buyers are beginning to think a break in values unlikely, and consequently are making every effort for future supplies.

Plain oak heads the list in hardwoods; quartered oak holds a firm position; high-grade chestnut and poplar are about the weakest quoted at this time; sound wormy chestnut and low-grade poplar are in good demand; ash is stronger; birch, beech, cherry and basswood maintain good places; the mahogany and veneer market is strong.

◀ BOSTON ▶

There has been a fair volume of new business reported in the market for hardwood lumber. Both manufacturers and dealers are firm in their demands for full prices. The tendency upon the part of manufacturers is to ask higher prices. Some buyers admit that they look for further advances as soon as they begin to purchase in larger lots. The stocks of dry lumber at the mills are not large, according to reports that are received here weekly and large wholesale dealers are not overburdened with supplies of desirable stock. Dealers in this market state that they find it harder to locate lots of desirable hardwood lumber this spring than ever before. Manufacturers show no anxiety to make sales. The large consuming manufacturers in this market are fairly busy.

There has been a good demand for veneers at good prices. Demand has been unusually brisk this spring and a further increase in business is looked for. One of the features of the hardwood market is the strong demand for plain oak and the strong prices at which it is held. During the past few months the position of this lumber has been growing stronger until today prices are higher than they have ever been. Quartered oak has also been enjoying a very good demand with a larger volume of business than for some time past. Walnut is very firm with offerings small. Maple has been in fair demand in this market.

◀ BALTIMORE ▶

There is no reason whatever for changing the verdict on the hardwood trade which was passed a month ago, except in so far as to state that prices are either very firm or still on the advance. Because of an active demand throughout the winter, or in consequence of a restricted production, stocks at the present time in nearly all divisions of the trade are far from plentiful and dealers find it difficult to provide for their wants. The experience of a hardwood man here will serve to illustrate the situation. He had occasion to send out some letters of inquiry, and, receiving a reply from one of the correspondents, he promptly accepted by telegraph, only to be informed by return mail that his message came too late and that the lumber had been placed with another firm. Instances are related of dealers sending out tenders and getting acceptances from every one of the concerns written to. Under the circumstances it is only natural that the quotations should continue to advance. But for the fact that lumber is about as high as it can well go, there would be practically no limit to prices. A further advance has taken place in sound wormy chestnut, which grade is from \$3 to \$5 higher than it was last summer. The higher grades of chestnut are also in very good request, and the same can be said of ash and other woods. Poplar is about holding its own, with wide stocks just a little more active, but with the list in the main unchanged. Some of the exporters report an easing off in the demand for boxed hearts on the other side. They say that the short lengths have declined decidedly more than the regular sizes, the former bringing perhaps \$5 per 1,000 feet less than they did with prices at the top notch, while the decline of the long lumber amounts to about \$1, with an average of \$2.50. For a time boxed hearts brought an average of 2s 7½d, but now stocks 15 feet 6 inches are quoted at 2s 7d, with planks under 15 feet at 2s 4½d. The decline is attributed to inordinately heavy forwardings of short lengths, the mills sending such stocks over and taking a chance on them, together with the long lengths. The foreign trade does not take kindly to the short lengths and has seized the opportunity of liberal supplies to depress prices.

The rest of the foreign trade is less seems to be in very good shape, with stocks not excessive and with the outlook for a continuance of activity encouraging.

◀ COLUMBUS ▶

While the weather has not been the most favorable during the past fortnight, trade in hardwoods has been active in this market. The demand for all varieties has been good, which, coupled with short stocks, has resulted in high prices all along the line. Every change in quotation has been toward higher levels while there is no weakness in any particular.

One of the best phases of the market is the demand on the part of both yards and manufacturing establishments. Both are buying well and the result is a good movement of all varieties. Factories engaged in making furniture, implements and vehicles are the best buyers on the local market although other concerns also are buying well. Factories are not stocking up any, and their purchases are for immediate wants only. Yards are inclined to stock up some in anticipation of a better demand when the spring building season opens. There is every indication of an active building season as architects and builders are busy on plans.

The movement of all of the grades is fairly uniform and there is no accumulation in any item. Oak and chestnut are probably the strongest points in the market. Both plain and quartered oak are in good demand and extra high quotations are maintained. Chestnut is moving well and sound wormy is very strong. Poplar is better now and automobile concerns are buying the wide sizes better. Ash is stronger and the same is true of basswood. Walnut is moving some. Other hardwoods are unchanged. Collections are reported good in every section.

◀ CINCINNATI ▶

The fine weather that has been much in evidence during the last several weeks would seem to indicate that spring has arrived. Yard men have worked under most favorable conditions and yards have been placed in the best possible shape to take care of the heavy receipts from southern producing points that have been arriving steadily during the last few weeks. Stocks of fairly good size are now in the hands of wholesalers at this point and the assortment is quite satisfactory except in some items that have been in such steady demand as to make it practically impossible to accumulate anything worth speaking of. There seems to be no end to the demand for all grades and thicknesses of plain oak and ash, quartered oak is also in active demand. Low-grade hardwoods suitable for box making purposes are very scarce and difficult to accumulate.

The outbound business is on the increase and wholesalers are receiving many inquiries for most of the hardwoods, indicating a continuation of the present satisfactory demand from the big wood consuming factories of this section. The furniture trade is holding up so well as to assure a steady demand from that source, while the box factories are continuously calling for material. The demand for hardwoods from the planing mills is increasing and should increase more rapidly from now on as the season is almost upon us for a big demand for this class of manufactured stock. The implement works all over this section are very busy and have been big consumers of stock suitable for their purpose. Dealers in hardwoods are more than satisfied with present conditions and are much encouraged over the prospects for a very early and heavy demand for all of their product. There is not at this time any weak item on the list and prices are holding up strong with no indications of any break. Manufacturers declare there is no possible chance for lower prices to prevail this season.

Demand for common and better poplar is on the increase, and prices remain firm. Wide stock is in much better call and dealers feel very much encouraged and quite well satisfied with conditions. Low grades are much sought after and are very scarce with prices very high.

◀ INDIANAPOLIS ▶

There has been a decided reaction in the local hardwood market during the last two weeks. As one wholesaler expressed it, the bottom appears to have fallen out all at once. Dealers are reported to have practically as large stocks as they wish to carry, considering the present high prices. Manufacturing concerns using hardwoods are said to be fairly well stocked.

At the present time, the volume of business is much less than during the corresponding period of last year. During the first three and one half months of this year, however, the volume of trade was better than for the corresponding period of last year.

There is considerable inquiry for inch stuff, which local wholesalers are having difficulty in getting. Prices are excellent and promise to hold their own for some little time to come.

◀ TOLEDO ▶

There is a considerable scarcity of hardwoods on the Toledo market, especially dry stocks, and local yards stocks are far from being well filled. Plain oak continues a leader both as to demand and prices. Quartered oak is bringing good prices but it is not so strong in demand. One of the most wanted materials here at present is birch, which is in great demand by furniture concerns. Basswood is being used heavily as a substitute for birch, which is so scarce and high that few of the whole-

TIMBER ESTIMATES

REPORTS INCLUDED
TOPOGRAPHICAL MAP, DETAIL ESTIMATES & WRITTEN REPORT

GARDNER & HOWE

ENGINEERS

Clarence W. Griffith Department Manager, Porter Building, Memphis, Tenn.

Bluestone Land & Lumber Company

MANUFACTURERS

WEST VIRGINIA HARDWOODS

Soft White Pine, Oak, Poplar, Chestnut, Hemlock

Band Sawed Stock RIDGWAY
COMPLETE PLANING MILL FACILITIES PENNSYLVANIA

WANTED

All Kinds of High-Grade

HARDWOODS

S. E. SLAYMAKER & CO.

Representing WEST VIRGINIA SPRUCE LUMBER CO., Fifth Avenue Building, NEW YORK
Cass, West Virginia.

Our First

MAHOGANY

Log

Was Opened Up Yesterday March Twenty-Fourth

on our brand new band mill. All our logs are genuine African stock and our predictions as to their quality are being well borne out by the beautiful figure—ideal for high-grade piano, furniture and other cabinet work—that is shown in the flitches.

In a few days our slicer and three veneer saws—the last word in design, manufacture and installation—will start turning these flitches into Veneer.

Buyers will do well to consider our stock and facilities for perfect manufacture before placing orders.

In addition to a splendid assortment of mahogany logs our log yards contain a fine lot of selected Indiana white oak which we will manufacture shortly.

We invite your inspection and would appreciate your inquiries.

Fred W. Black Lumber Company Chicago, Ill.

Take Douglas Park L to 40th Ave. and walk one block South

A Remarkable Shipment of Mahogany

For the past two weeks we have been unloading at our Chicago plant the most remarkable shipment of mahogany logs we ever received.

This shipment fills several cars and is made up of nearly **six hundred selected logs**.

Every precaution was taken to insure as far as is possible in mahogany only such logs as will produce the **very highest type of mahogany veneer for high-class cabinet purposes**.

Those logs already opened up reveal an amazing quality, character and variety of figure. We will secure from this shipment some **brilliantly mottled wood for high-class piano manufacture**.

Unusually good stock for furniture purposes has already been cut from this shipment and a very considerable quantity more is insured.

Altogether, judging from what has already been shown, this shipment will place upon the market the finest stock of mahogany veneer that has yet been turned out at our plant.

Buyers are already too familiar with our perfection of manufacture to need further explanation of our methods.

Users of mahogany visiting Chicago are earnestly invited to call and inspect the Willey plant and veneer and lumber warehouse at Robey Street and Blue Island Avenue. Blue Island Avenue car at the postoffice to Robey Street.

C. L. WILLEY, Chicago

Largest Mahogany Veneer and Lumber Producing Plant in the World

sale concerns are able to secure it. Ash is in good demand but poplar is waning somewhat. There is a fair demand for hickory and prices are high.

Builders are waiting for an opportunity to begin operations and a few warm days held out considerable hope of an early season. There are several new up-river additions to be opened and a boom is also presaged for Air Line Junction, a suburb of Toledo, where the Lake Shore railroad is expending \$3,000,000 in yard and shop improvements. Building has already begun in that section and, according to architects' plans, building there will be heavy this summer not only in residence structures but in investment structures as well. The work has begun of tearing down old shacks in what is known as Toledo's "murder district" near the court house, where the new civic center will be built at enormous expense, the first building to be constructed there this summer. This building will be a city hall. Large quantities of hardwood will be used in the structure.

◀ NASHVILLE ▶

The local lumbermen continue to do a thriving business. For the past two weeks, however, the local market has been devoid of specially interesting or important features. It is confidently believed that greatly increased activity will be noticeable with the opening of the spring season, activity which will benefit not only the manufacturers of hardwoods but the retail trade as well, for the latter is promised all they can comfortably handle, with the large amount of building in prospect. The prevailing prices are still stiff, and there is a good general call for all desirable stock. Good dry stocks are still low, however, and hence hard to get. There is an increased demand for ash and good calls for plain oak. Quartered oak is moving well; there is activity with gum and chestnut, and there is a good call for cottonwood and low-grade poplar. The millmen, especially those in the country sections, are behind with their orders and are making strong efforts to keep up with the demand, but have been held back by bad weather, which has also handicapped the log operators and prevented them from hauling much to the railroads for shipment. This has caused light receipts of logs here, but the shipments will be materially increased with the advent of good spring weather.

During February there was a decided hesitation noticed among buyers, but this is not to be seen just now, and there are plenty of orders to be had at prevailing prices from all needing stock. There are still comparatively few orders for future deliveries, however, and the producers show little disposition to book orders for future deliveries. The stocks of a desirable character being low, producers feel that the demands will increase with added spring calls, but the buyers seem to feel that prices will go down if the present rate of production continues.

◀ BRISTOL ▶

Hardwood men of this territory report that orders are not coming in as rapidly as they have been, but they are not complaining, and feel that a short breathing spell will be of advantage to business, as most of the mills are oversold and working overtime in an effort to get up their orders already booked. The outlook is considered very favorable and it is generally thought that 1913 will be a splendid year for the trade.

◀ LOUISVILLE ▶

The demand for hardwoods shows no diminution in strength, and the price list is continuing on an extremely firm basis, though advances have not been numerous. The strength of the market is of a satisfactory character, however, and apparently means that lumbermen will be able to do business under favorable conditions for many months to come. More lumber is coming into the market with the opening of the spring season, which has released a good deal of stock cut up at the small interior mills; but this has been snapped up so quickly that it has not had a chance to make itself felt as a bear factor. In fact, there are no conditions of this type which could have much weight in the face of the big proposition that consumers need lumber, that they are working their factories at full speed, and that they are not trying to analyze conditions with a view to getting prices down a little, but are chiefly concerned with getting the material on their yards and turning it out in the form of the finished product. Companies which have contracted for their lumber are specifying freely, and those which buy in carloads are rushing shipments through in jig time. Plain oak continues to be a best seller, with red going best, but plain white also being absorbed as soon as offered. Poplar is improving and quartered oak remains strong. Ash is scarce and high in price, and cottonwood and gum are moving briskly. Thick hickory has been in demand lately.

◀ MILWAUKEE ▶

The scarcity of dry stocks is causing more and more uneasiness as the season progresses and predictions are being made that considerable difficulty will be experienced before new stocks begin to arrive. Basswood generally makes its first appearance early in May, but birch and other lines will not begin to arrive to any extent until June. Business is naturally curtailed in some lines because of the shortage, as buyers are inclined to take only enough to meet their present requirements. The

immediate wants of the trade are increasing daily, however, with the advance of the season. Prices in some lines, particularly in birch, oak and maple, have advanced recently. It is reported that maple flooring has advanced about \$1 per thousand during the last two months.

Logging operations in northern Wisconsin are about at an end, as a result of the warm weather which is being experienced. Some of the camps with only a short haul to contend with are still in operation, but the majority of the camps have broken up. Very few logs have been left in the woods, however, as efforts have been made to keep them hauled out this season. Reports from lumbering centers say that despite the shortness of the season, the total log output this year will be considerably above the average.

Building operations in Milwaukee are fully up to the average and the indications are that the record of last year, when the total amount of building exceeded \$15,500,000, will be exceeded. Building permits for the week ending Mar. 15 soared well above the \$100,000 mark, bringing the figures of the month to date for permits issued by Building Inspector W. D. Harper to three times what they were at the corresponding time a year ago.

Receipts of oak from the South are as light as ever and wholesalers say that they are having trouble in meeting the demands of the trade in both plain and quartered oak.

◀ GLASGOW ▶

The carters' strike in this district having now been settled, business has begun to pull up and in some instances it is decidedly brisk. Merchants are more anxious to buy from what stock is available and at enhanced prices. Removals from the quays are now proceeding briskly but it will take some time before the congestion is cleared. Imports of late have comprised of spruce deals, birch logs and American hardwoods. Both spruce and birch timber have sold well and fair prices have been the rule. Shippers here are not too well pleased with the results of these consignment parcels of spruce as compared with other ports. It must be borne in mind, however, that parcels have been going into some other ports with fair regularity with the result that prices have eased up gradually, while to this port consignment lots have been few and far between, hence the difficulty of getting buyers to face high prices all at once.

The import of Riga deals to this market must also of course be taken into account. The shipment of American hardwoods per steamship "Marina" has sold particularly well and some little difficulty has been caused through wagon builders, who are particularly busy, not being able to get delivery of goods bought. The oak, walnut and poplar logs are reported to have been sold at good figures. The lull in the pitch pine market still continues and seems to be general in all the markets. Chartering from the gulf is very slow although two fixtures are reported at considerably less than rates current a few weeks ago.

Several fixtures of steamers are reported to carry spruce deals from New Brunswick and Nova Scotia at about £1 per standard over last year's rates and taking into consideration the increased f. o. b. price, dear spruce is inevitable.

Ash and hickory logs are selling well and a number of contracts for fair lines are reported during the past few days. Quebec timber contracts are practically unknown, so far only a few contracts for deals having been closed. Gaboon mahogany, of which there was a large import the latter part of 1912, is now being quoted at over 2s for stock to come forward, which represents a considerable advance over prices current last year.

◀ LIVERPOOL ▶

Market conditions are keeping quite brisk though values in many instances show considerable reductions. This is regarded in this market as a more healthy state of affairs as the general opinion is that prices were too inflated. At the same time the reduction in values has frightened buyers of the market and at the moment there seems little inclination to buy any stocks except for immediate requirements. Shippers are advised on no account to send stocks on consignments wherever they can avoid doing so. The market is in no mood for large shipments of the character and if any volume of stock comes, quite an extensive slump will surely follow. The position of hickory is an excellent testimony of the tendency of the market. Consignment parcels have arrived during the last few months in quantities quite out of proportion to the demands with the result that the market price has had to be reduced. In fact hickory has not been bringing as much during the last month as ash, which is of course quite absurd.

Round ash is very firm and buyers are all keen to purchase. Lumber is also good. Prime parcels are moving promptly and buyers now are not so keen on the "white" stipulation. Hard brown ash is quite salable though it is difficult to define this description in a contract.

Birch stocks are very low and the new wood should come to a good market. Few sales have been reported but they do not seem to be extensive. The cheaper lumber stocks are coming forward with freedom and are meeting with a ready acceptance from buyers.

The mahogany position keeps firm. General anticipation seems to be that prices will show an early reduction and in all probability the market would be more healthy at lower figures.

Carolina Spruce Co.

MANUFACTURERS

SPRUCE & HARDWOOD

Mills: Pensacola, N. C. **LUMBER** Capacity 90,000 ft per day

4 cars 1 1/4 No. 1 Common Poplar	1 car 1 1/4 1 & 2 Poplar
3 cars 1 1/4 No. 2 Com. A Poplar	2 cars 5 1/4 No. 1 Com. & Bet. Poplar
1 car 1 1/4 Clear Sap Poplar	1 car 1 1/4 1 & 2 Basswood

Charles K. Parry & Co. Sole Selling Agts. Land Title Bldg. Philadelphia

On the Following Stock We Will Make Special Prices for Prompt Shipment:

82,000' 2' No. 2 Common Poplar.	58,000' 6 1/4 No. 1 Com. Chestnut
10,000' 1 1/2" No. 1 & 2 Qtd. Poplar.	36,000' 8 1/4 No. 1 Com. Chestnut
20,000' 1x24" & up No. 1 and Panel Poplar	28,000' 4 1/4 No. 1 & 2 Com. Chestnut
40,000' 3' No. 1 & 2 Poplar	41,000' 5 1/4 No. 1 & 2 Com. Chestnut
15,000' 4' x 18 to 30' No. 1 & Panel Poplar	69,000' 6 1/4 No. 1 & 2 Com. Chestnut
30,000' 4' x 7 to 25' No. 1 & 2 Poplar	12,000' 6 1/4 No. 1 & 2 Red Birch
35,000' 5 1/8 x 18" & up No. 1 & Panel Poplar	19,000' 8 1/4 No. 1 & 2 Red Birch
117,000' 6 1/4 S. W. & No. 2 Common Chestnut	86,000' 3" No. 1 & 2 Red Birch
38,000' 1x12" & up No. 1 & 2 Chestnut	6,000' 4" No. 1 & 2 Red Birch
58,000' 1" No. 1 Com. Chestnut	21,000' 5/4 No. 1 & 2 Cherry
47,000' 5 1/4 No. 1 Com. Chestnut	10,000' 8 1/4 No. 1 & 2 Cherry
	88,000' 4 1/4 No. 1 Common Cherry
	19,000' 5 1/4 No. 1 Common Cherry
	10,000' 8 1/4 No. 1 Common Cherry

The Atlantic Lumber Co.

70 Kilby Street, Boston, Mass.

INVESTMENTS

If satisfactory they must be *safe* and *profitable*. Timber investments are both.

Certain fundamentals must be taken into account in buying timber. The buyer should know something of the intrinsic value of the timber. It should be bought at an opportune time. It should be protected from fire and other enemies. It should be resold or manufactured when the time is ripe.

Such procedure calls for intimate knowledge, such as we have acquired during our connection with the timber trade of America embracing a third of a century.

Our faith in timber is as firm now, when it commands high prices, as it was years ago when timber was sold by the acre at nominal prices.

We make a specialty of managing timber investments, carrying on the detail work from date of purchase to date of sale, our compensation being a part of the net profits.

We will handle an investment for you on that basis.

If you wish to share in the profits to be derived by those who buy timber and hold it until needed, investigate this offer.

James D. Lacey & Co.

Timber Land Factors

Chicago, 1750 McCormick Building

Portland, 1104 Spalding Building

Seattle, 1009 White Building

W H Y ?

WHY DO more than 320 of the most prominent and successful lumber manufacturers exchange nearly \$26,000,000 of indemnity against fire loss at

Manufacturing Lumbermen's Underwriters

B E C A U S E !

BECAUSE it is the oldest and strongest inter-insurance association among lumbermen, being now in its fourteenth year.

BECAUSE \$728,910.41 cash savings have been returned to members.

BECAUSE \$756,787.21 cash surplus, owned entirely by the members, has been accumulated.

BECAUSE \$2,012,427.96 has been paid in losses under prompt and equitable adjustments without resort to quibbling or technical controversy.

BECAUSE it was the first to settle lumber losses on a market value basis.

BECAUSE the regular, frequent and thorough inspections given the plants of all members help them to prevent fires, thus materially reducing both the fire waste and the cost of indemnity.

FOR FULL PARTICULARS ADDRESS

Western Representative
HARRY B. CLARK,
Portland, Ore.

Harry Rankin & Co.

Attorney in Fact,
KANSAS CITY, MO.

Advertisers' Directory

NORTHERN HARDWOODS.

American Lumber & Mfg. Co....	12
Beecher & Barr.....	13
Buffalo Hardwood Lumber Co.....	67
Cartier-Holland Lumber Company..	2
Coale, Thos. E., Lumber Company..	13
Cobbs & Mitchell, Inc.....	3
Craig, W. P., Lumber Co.....	13
Curl, Daniel B.....	13

East Jordan Lumber Company.....	65
Elias, G., & Bro.....	67
Estabrook-Skeele Lumber Co.....	4

Flanner-Steger Land & Lumber Co.	
Forman, Thos., Company.....	66

Goodyear, C. A., Lumber Co.....	60
---------------------------------	----

Hanson-Turner Company.....	62
Heyser, W. E., Lumber Co.....	11
Holyoke, Chas.....	12
Holloway Hardwood Lumber Co....	2

Jones Hardwood Company.....	12
-----------------------------	----

Kent, J. S., Company.....	12
Klann, E. H.....	57
Kneeland-Bigelow Company, The...	3

Litchfield, William E.....	13
----------------------------	----

McIlvain, J. Gibson, & Co.....	2
McLean, Hugh, Lumber Co.....	67
Miller, Anthony.....	67
Mitchell Bros. Company.....	3
Mowbray & Robinson Company.....	11

Osgood & Richardson.....	57
--------------------------	----

Palmer & Parker Co.....	12
Parry, Chas. K., & Co.....	53

Sawyer-Goodman Company.....	60
Smith, Fred D.....	57
Standard Hardwood Lumber Co....	67
Stearns Salt & Lumber Company..	8
Stephenson, I., Company, The.....	66
Stewart, I. N., & Bro.....	67
Stimson, J. V., & Co.....	64
Struthers Cooperage Company.....	
Sullivan, T., & Co.....	67

Taylor, W. R., Lumber Company....	12
Tegge Lumber Co.....	49

Vinke, J. & J.....	13
VonPlaten Lumber Co.....	66

Webster, George, Lumber Company.	13
White, Wm. H., Co.....	68
Wiggin, H. D.....	12
Williams, Ichabod T., & Sons.....	14
Willson Bros. Lumber Company.....	12
Wistar, Underhill & Nixon.....	13
Wood-Mosaic Company.....	13

Yeager, Orson E.....	67
Young, W. D., & Co.....	3

POPLAR.

Anderson-Tully Company.....	9
Atlantic Lumber Company.....	53
Farrin, M. B., Lumber Company.....	48
Faust Bros. Lumber Company.....	14
Kentucky Lumber Company.....	48
Logan, J. M., Lumber Co.....	6
Maphet & Shea Lumber Company...	6

Radina, L. W., & Co.....	11
Swann-Day Lumber Company.....	49
Vansant, Kitchen & Co.....	68
West Virginia Timber Company....	7
Whiting, Wm. S.....	65
Wood, R. E., Lumber Company.....	13
Yellow Poplar Lumber Company....	68

SOUTHERN HARDWOODS.

American Lumber & Mfg. Co.....	12
Anderson-Tully Company.....	9
Atlantic Lumber Company.....	53

Baker-Matthews Mfg. Co.....	65
Bennett & Witte.....	11
Black, Fred W., Lumber Co.....	51
Bluestone Land & Lumber Co.....	51
Boice Lumber Company.....	64
Booker-Cecil Company.....	48
Bradley, E. C., Lumber Company...	48
Brown, W. P., & Sons Lumber Co..	5
Buffalo Hardwood Lumber Co.....	67

Carrier Lumber & Mfg. Co.....	14
Cherokee Lumber Co.....	7
Coale, Thos. E., Lumber Company..	13
Conasauga Lumber Company.....	48
Crane, C., & Co.....	48
Curl, Daniel B.....	13
Davis, Edward L., Lumber Company	5
Dempsey, W. W.....	65
Duhlmeier Brothers.....	11

Elias, G., & Bro.....	67
Estabrook-Skeele Lumber Co.....	4

Farrin, M. B., Lumber Company.....	48
Faust Bros. Lumber Co.....	14
Flanner-Steger Land & Lumber Co.	

Garetson-Grease Lumber Co.....	65
--------------------------------	----

Heyser, W. E., Lumber Company...	11
Hill Brothers Tie & Lumber Co....	65
Himmelberger-Harrison Lumber Co.	65
Holloway Hardwood Lumber Co....	2
Huddleston-Marsh Lumber Co.....	2
Jones Hardwood Company.....	12
Johns-Mowbray-Nelson Company..	48
Kennedy, James, & Co.....	49
Kent, J. S., Company.....	12
Kentucky Lumber Company.....	48
Kimball & Kopcke.....	6
Klann, E. H.....	57
Kosse, Shoe & Schleyer Company...	49

Lamb-Fish Lumber Co.....	8
Litchfield, William E.....	13
Littleford, George.....	49
Little River Lumber Company.....	68
Logan, J. M., Lumber Co.....	6
Louisiana Long Leaf Lumber Co...	64
Louisville Point Lumber Company..	5

Maley, Thompson & Moffett Co.....	11
Maphet & Shea Lumber Company...	6
McIlvain, J. Gibson, & Co.....	2
McLean, Hugh, Lumber Co.....	67
Miller, Anthony.....	67
Mowbray & Robinson Company.....	11
Norman Lumber Company.....	5
Ohio River Saw Mill Company.....	5
Osgood & Richardson.....	57

Paepoke-Leicht Lumber Company...	7
Parry, Chas. K., & Co.....	53

Radina, L. W., & Co.....	11
Ransom, J. B., & Co.....	7
Riemeier Lumber Company.....	49
Richey, Halsted & Quick.....	38
Russe & Burgess, Inc.....	14
Salt Lick Lumber Company.....	65
Shawnee Lumber Company.....	49
Shiels, Chas. F., & Co.....	49
Slaymaker, S. E., & Co.....	51
Smith, Fred D.....	57
Standard Hardwood Lumber Co....	67
Stewart, I. N., & Bro.....	67
Stimson, J. V., & Co.....	64
Sullivan, T., & Co.....	67
Swann-Day Lumber Company.....	49
Vestal Lumber & Manufacturing Co.	6
Vinke, J. & J.....	13
Von Platen Lumber Co.....	66
Webster, George, Lumber Company.	13
West Virginia Timber Company....	7
Whiting, Wm. S.....	65
Whitmer, Wm., & Sons.....	12
Wiggin, H. D.....	12
Williams, Ichabod T., & Sons.....	14
Willson Bros. Lumber Company.....	12
Wistar, Underhill & Nixon.....	13
Wood-Mosaic Company.....	13
Wood, R. E., Lumber Company.....	13
Yeager, Orson E.....	67

Paepoke-Leicht Lumber Company...	7
Parry, Chas. K., & Co.....	53

Radina, L. W., & Co.....	11
Ransom, J. B., & Co.....	7
Riemeier Lumber Company.....	49
Richey, Halsted & Quick.....	38
Russe & Burgess, Inc.....	14

Salt Lick Lumber Company.....	65
Shawnee Lumber Company.....	49
Shiels, Chas. F., & Co.....	49
Slaymaker, S. E., & Co.....	51
Smith, Fred D.....	57
Standard Hardwood Lumber Co....	67
Stewart, I. N., & Bro.....	67
Stimson, J. V., & Co.....	64
Sullivan, T., & Co.....	67
Swann-Day Lumber Company.....	49
Vestal Lumber & Manufacturing Co.	6
Vinke, J. & J.....	13
Von Platen Lumber Co.....	66

Webster, George, Lumber Company.	13
West Virginia Timber Company....	7
Whiting, Wm. S.....	65
Whitmer, Wm., & Sons.....	12
Wiggin, H. D.....	12
Williams, Ichabod T., & Sons.....	14
Willson Bros. Lumber Company.....	12
Wistar, Underhill & Nixon.....	13
Wood-Mosaic Company.....	13
Wood, R. E., Lumber Company.....	13

Yeager, Orson E.....	67
----------------------	----

VENEERS AND PANELS.

Adams & Raymond Veneer Co.....	63
Ahnapee Veneer & Seating Co.....	62
Astoria Veneer Mills & Dock Co...	63
Black, Fred W., Lumber Co.....	51
Central Veneer Company.....	61
Hanson-Turner Company.....	62
Hoffman Bros. Company.....	61
Huddleston-Marsh Lumber Co.....	61
Jarrell, B. C., & Co.....	61
Kentucky Veneer Works.....	61
Kiel Wooden Ware Company.....	62
Knoxville Veneer Company.....	6
Louisville Veneer Mills.....	5
Maley, Thompson & Moffett Co.....	11
Memphis Veneer & Lumber Co.....	5
Mengel, C. C., & Bro. Company.....	49
Ohio Veneer Company.....	49
Putnam Veneer and Lumber Co....	63
Rayner, J.....	4
Rice Veneer & Lumber Company...	63
Southern Veneer Manufacturing	
Company.....	61
Underwood Veneer Company.....	63
Veneer Manufacturers' Company...	
Walker Veneer & Panel Co.....	57
Willey, C. L.....	52
Williams, Ichabod T., & Sons.....	14
Wisconsin Seating Company.....	62
Wood-Mosaic Company.....	13

Maley, Thompson & Moffett Co.....	11
Maphet & Shea Lumber Company...	6
McIlvain, J. Gibson, & Co.....	2
McLean, Hugh, Lumber Co.....	67
Miller, Anthony.....	67
Mowbray & Robinson Company.....	11
Norman Lumber Company.....	5
Ohio River Saw Mill Company.....	5
Osgood & Richardson.....	57
Paepoke-Leicht Lumber Company...	7
Parry, Chas. K., & Co.....	53
Radina, L. W., & Co.....	11
Ransom, J. B., & Co.....	7
Riemeier Lumber Company.....	49
Richey, Halsted & Quick.....	38
Russe & Burgess, Inc.....	14
Salt Lick Lumber Company.....	65
Shawnee Lumber Company.....	49
Shiels, Chas. F., & Co.....	49
Slaymaker, S. E., & Co.....	51
Smith, Fred D.....	57
Standard Hardwood Lumber Co....	67
Stewart, I. N., & Bro.....	67
Stimson, J. V., & Co.....	64
Sullivan, T., & Co.....	67
Swann-Day Lumber Company.....	49
Vestal Lumber & Manufacturing Co.	6
Vinke, J. & J.....	13
Von Platen Lumber Co.....	66
Webster, George, Lumber Company.	13
West Virginia Timber Company....	7
Whiting, Wm. S.....	65
Whitmer, Wm., & Sons.....	12
Wiggin, H. D.....	12
Williams, Ichabod T., & Sons.....	14
Willson Bros. Lumber Company.....	12
Wistar, Underhill & Nixon.....	13
Wood-Mosaic Company.....	13
Wood, R. E., Lumber Company.....	13
Yeager, Orson E.....	67

MAHOGANY, WALNUT, ETC.

Astoria Veneer Mills & Dock Co....	63
Black, Fred W., Lumber Co.....	51
Duhlmeier Brothers.....	11
Huddleston-Marsh Lumber Co.....	67
Littleford, George.....	49
Maley, Thompson & Moffett Co.....	11
Memphis Veneer & Lumber Co.....	5
Mengel, C. C., & Bro. Company.....	5
Palmer & Parker Co.....	12
Purcell, Frank.....	65

Astoria Veneer Mills & Dock Co....	63
------------------------------------	----

Childs, S. D., & Co.....	57
Gerlach, The Peter, Company.....	57
Kraetzer Company, The.....	50
Lumbermen's Credit Association....	4
Mechanical Rubber Company.....	59
Tamms Silica Company.....	57
Wausau Advancement Association..	60
Westinghouse Electric & Mfg. Co...	

Rayner, J.....	4
Struthers Cooperage Company.....	
Willey, C. L.....	52
Williams, Ichabod T., & Sons.....	14

HARDWOOD FLOORING.

Beecher & Barr.....	13
Carrier Lumber & Mfg. Co.....	14
Cobbs & Mitchell, Inc.....	3
Eastman, S. L., Flooring Co.....	66
Farrin, M. B., Lumber Company...	48
Forman, Thos., Company.....	66
Kerry & Hanson Flooring Co.....	66
Louisiana Long Leaf Lumber Co...	64
Mitchell Bros. Company.....	3
Salt Lick Lumber Company.....	65
Stearns Salt & Lumber Company...	8
Stephenson, I., Company, The.....	66
Webster Lumber Co., George.....	13
White, Wm. H., Co.....	68
Wilce, T., Company, The.....	4
Young, W. D., & Co.....	3

WOODWORKING MACHINERY.

Cadillac Machine Co.....	58
Linderman Machine Co., The.....	
Mershon, W. B., & Co.....	59
Phoenix Manufacturing Co.....	59
Saranac Machine Company.....	59
Steinmetz, C. M.....	12
Westinghouse Electric & Mfg. Co..	

LOGGING MACHINERY.

Baldwin Locomotive Wks.....	
Clyde Iron Works.....	58
Lidgerwood Mfg. Co.....	58
Russel Wheel & Foundry Co.....	

DRY KILNS AND BLOWERS.

Grand Rapids Veneer Works.....	66
Kraetzer Company, The.....	50
Phila. Textile Mch. Co.....	12

SAWS, KNIVES AND SUPPLIES.

Atkins, E. C., & Co.....	
Simonds Mfg. Co.....	

LUMBER INSURANCE.

Central Manufacturers' Mut. Ins. Co.	
Epperson, U. S.....	5
Indiana Lumbermen's Mut. Ins. Co..	11
Lumber Mutual Fire Insurance Co..	
Lumbermen's Mutual Ins. Co.....	
Lumbermen's Underwriting Alli-	
ance.....	
Lumber Underwriters.....	14
Pennsylvania Lumbermen's Mutual	
Fire Ins. Co.....	
Rankin, Harry & Co.....	54

TIMBER LANDS.

Lacey, James D., & Co.....	53
Spry, John C.....	4

TIMBER ESTIMATORS

Griffith, Clarence W.....	51
McDonald, Thos. J.....	56

MISCELLANEOUS.

Astoria Veneer Mills & Dock Co....	63
Childs, S. D., & Co.....	57
Gerlach, The Peter, Company.....	57
Kraetzer Company, The.....	50
Lumbermen's Credit Association....	4
Mechanical Rubber Company.....	59
Tamms Silica Company.....	57
Wausau Advancement Association..	60
Westinghouse Electric & Mfg. Co...	

CLASSIFIED ADVERTISEMENTS

Advertisements will be inserted in this section at the following rates:

For one insertion.....20c a line
For two insertions.....35c a line
For three insertions.....50c a line
For four insertions.....60c a line

Eight words of ordinary length make one line. Heading counts as two lines. No display except the headings can be admitted.

Remittances to accompany the order. No extra charges for copies of paper containing the advertisement.

EMPLOYMENT WANTED

WANTED SAWYER

for hardwood double circular mill sawing wagon and car stock. Must take care of his saws. No boozing need apply. Address, 124 Elclid Ave., Lima, Ohio.

WANTED—EMPLOYMENT

When you want a salesman for New York state territory, write us. We can supply you with a good man. EMPIRE STATE ASSOCIATION of Wholesale Lumber & Sash & Door Salesmen. Chas. Johnson, Sec'y, 96 Kirkland Rd., Rochester, N. Y.

TIMBER ESTIMATING

TIMBER ESTIMATES

Estimating Southern timber a specialty. Maps, detailed reports as to stand, quality and logging conditions. Have a few high-class properties for sale. Can furnish best references.

THOS. J. McDONALD,
East Tenn. Natl. Bank Bldg.,
Knoxville, Tenn.

WAGON STOCK WANTED

I AM IN THE MARKET FOR

75 to 100 cars of oak poles, bolsters, sand boards, eveners, and reaches; and hickory and maple axles. Will inspect at shipping point, and pay cash. E. B. BROWN, 372 Bayne St., Buffalo, N. Y.

WAGON STOCK FOR SALE

FOR SALE—HICKORY RIM STRIPS.

25,000 ft. 1½x1½ and 1½x1½x6 and 7' long. 12,000 pcs. 1½x1½x36" long.

1 car 1x1x48" long cull golf sticks.

I want to sell the output of my mill for the coming summer, sawing oak wagon stock, etc.

W. I. NORRIS, Fairview, Ark.

LOGS WANTED

WANTED—BLACK WALNUT LOGS

500 cars good black walnut logs, 10" and up in diameter, 6 ft. and up long. Will inspect at shipping point and pay cash.

GEO. W. HARTZELL, Dayton, Ohio.

WANTED—HARDWOOD LOGS

200,000 ft. 28" and up White Oak logs.

200,000 ft. 12" and up Walnut logs.

50,000 ft. 12" and up Cherry logs.

C. L. WILLEY, 2558 S. Robey St., Chicago.

TIMBER LANDS FOR SALE

FOR SALE—BY THE OWNER

30,000,000 ft. hardwood. 75% red gum, balance mixed oak, cypress, ash and elm. This is a bona fide proposition. R. R. within ½ mile of the timber. Water transportation available. BOX 371, Memphis, Tenn.

FOR SALE—15 MILLION FEET CYPRESS

A tract of extra large choice cypress. Have detail cruise. Located on navigable river and trunk line of railroad. Near deep water port. Address, OWNER, Box 512, Brunswick, Ga.

ARE YOU INTERESTED IN GUM

and Red Oak?

I own in fee simple two small and carefully selected tracts of high-class gum and red oak stumpage. Will sell at price to make the buyer good money either as an investment or as an operating proposition.

Will deal with principals only. Address in confidence, "BOX 22," care HARDWOOD RECORD.

FOR SALE—VALUABLE TRACT OF

Hardwood Timber: 7,000 acres virgin forest immediately on branch line of the Southern Ry. in western N. C.; title perfect. For further information address, F. R. HEWITT, Hewitt, N. C.

TIMBER WANTED

WANTED—CROSS TIES

for treatment, 7" thick, 8½' long, sawed, pole and hewn. Red, pin, black, yellow oaks, hard maple and birch. For further particulars write

R. A. BURY, Asst. Gen. Tie Agent,
N. Y. C. Lines, Detroit, Michigan.

LUMBER FOR SALE

OAK, POPLAR, ASH

and all other hardwoods, in all grades and thicknesses, can be readily sold if advertised in the Wanted and For Sale section of HARDWOOD RECORD. If you have a large stock you want to sell try a few lines in this department and see what a lot of inquiries they will bring you.

DIMENSION STOCK FOR SALE

FOR SALE

100,000 feet of 4/4" Quartered White Oak Dimension stock; absolutely dry. Send for list of sizes. Address, "BOX 35," care HARDWOOD RECORD.

DIMENSION STOCK WANTED

POPLAR DIMENSION STOCK

Glued-up for piano cases. Will furnish full particulars to concerns able to turn out this class of stock in carload lots. Good prices. Cash payments. Address, "BOX 39," care HARDWOOD RECORD.

WANTED

Hard Maple and Beech Squares 42", 44", 48" long, plump 1"x1". Must be clear and straight. If you have any to offer write us. Will take them dry or green.

THE COLUMBIA MFG. CO.,
New Philadelphia, Ohio.

WANTED

DIMENSION OAK

Plain and Quartered

Various sizes for chair and table factories.

Send to us for specifications and prices.

INDIANA QUARTERED OAK CO.

7 East 42nd Street,
New York.

WANTED

Ten cars Dimension Stock:

1 x 1 x 16
1 x 2½ x 16
1 x 3 x 16
1¾ x 1¾ x 19
2 x 2 x 19

Clear Oak. Address, "BOX 38," care HARDWOOD RECORD.

TIMBER FOR SALE

WHITE & POST OAK TIES FOR SALE

1 cars 7" x 9" x 8' 6".

1 car 6" x 8" x 8'.

E. W. PRATT, JR., Hopkinsville, Ky.

LUMBER WANTED

WANTS RED AND WHITE OAK

A Canadian manufacturing company is in the market for a quantity of plain Red and White and quarter-cut White Oak, 3/4 to 8/4, and will contract for entire cut in these woods in No. 2 common and better grades from either small or large mills. Send particulars of quantity and where located, and best price f. o. b. cars at shipping point. Address, "BOX 24," care HARDWOOD RECORD.

BUYERS OF HARDWOODS.

Do you want to get in touch with the best buyers of hardwood lumber? We have a list, showing the annual requirements in lumber, dimension stock and veneers and panels of consumers of those materials throughout the United States and Canada. The service is free to advertisers in the RECORD. It will interest you. Write us for further information about our "Selling Lumber by Mail System."

HARDWOOD RECORD, Ellsworth Bldg.,
Chicago.

WANTED—BLACK WALNUT LOGS AND LUMBER

Good sound walnut logs 14" and up in diameter, either hewed or rough. Will inspect and pay cash at shipping point. J. W. COMLY,
Exporter, Steubenville, Ohio.

WANTED

500,000 feet 4/4" sound wormy Chestnut, dry. Quote cash price Boston rate of freight. State when you could commence and complete shipment. Address, "BOX 37," care HARDWOOD RECORD.

WANTED TO BUY

100,000 feet 4/4, 5/4 and 6/4 log run Butternut.
DUHLMEIER BROTHERS, Cincinnati, O.

WANTED

A few cars 4 4" 1sts and 2nds soft gray elm, either green or dry.

200,000 ft. 8/4" No. 1 common and better hard maple. Quote price, with detailed description of stock. Address

"BOX 32," care HARDWOOD RECORD.

WANTED

White Oak, hewn and sawn, also ship plank. Address G. ELIAS & BRO. for further particulars, 965 Elk Street, Buffalo, N. Y.

MOULDINGS AND TRIM

In Oak, Chestnut and Basswood, straight and mixed cars. Can use four cars per month. We pay cash and will advance payments if convenient. Address, "BOX M," care HARDWOOD RECORD.

RAILWAY EQUIPMENT FOR SALE**FOR SALE**

One 30 ton Shay locomotive, standard gauge, shop construction specifications furnished.

THE CADILLAC HANDLE CO.
Cadillac, Mich.

BUSINESS OPPORTUNITIES**TO LET LOGGING CONTRACT**

on 3,600 acres of hardwood timber close to railroad. Attractive proposition to right parties. Address "BOX 31," care HARDWOOD RECORD.

EXCELLENT OPPORTUNITY

for man to go in manufacturing business. Have well-equipped hardwood factory suitable for making spokes and vehicle stock. Healthy location in town six thousand, on two rivers and two railroads. Address

"BOX 72," care HARDWOOD RECORD.

FOR SALE—TO PARTIES

with \$5,000 or more—an established wood turning business in Philadelphia, Pa. An equal or larger amount in raw material will be invested. Power invested or furnished. Good opportunity for those in woodworking line.

Address "BOX 36," care HARDWOOD RECORD.

BUSINESS CHANCES

On account of other business interests, I offer to active young man, thoroughly familiar with the manufacture of furniture, preferably the manufacture of extension tables, an opportunity for investment in an established, growing furniture factory. Do not answer unless you mean business, and in first letter give age, experience, references and state amount you are able to invest. Address

"GRAND CHANCE," care HARDWOOD RECORD.

MACHINERY FOR SALE**FOR SALE**

- One Egan tenoner.
- One router.
- One combination rip and cut-off saw.
- One vertical 4 spindle boring machine.
- One arm disc sanding machine.
- One automatic turning lathe.
- One 24" pony planer.
- One 30" jointer.

UNITED REFRIGERATOR & ICE MACHINE CO., Purchasing Department, Kenosha, Wis.

BOILERS FOR SALE

Three second hand boilers, 2 and 3 ft. 11, 51" x 14', 4" tubes. Will sell reasonable.

E. W. PRATT, JR., Hickory, Ky.

MACHINERY WANTED**WE ARE IN THE MARKET FOR**

a used D. C. generator between 200 and 300 K. V. A. 440 V. 3 phase, 60 cycle. A. C. current for early delivery. Give full description, photo and best price.

HEINEMAN LUMBER COMPANY, Merrill, Wis.

MISCELLANEOUS**WANTED—HARDWOOD LUMBERMEN—**

to try the Gibson Tally Book. The three-throw aluminum tally ticket cover accommodates any form of ticket desired. The use of the special triplicate tally ticket supplied, printed on water-proof paper with carbon backs makes tallies unalterable. For durability, convenience, accuracy and for systematizing the inspection of lumber the Gibson tally method can't be beat.

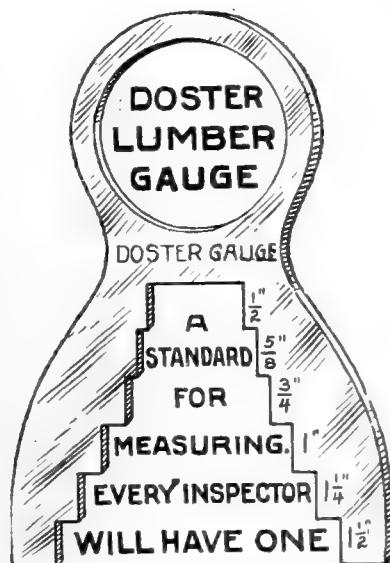
Special forms of tally tickets mailed on application. Covers sold on approval to responsible concerns.

HARDWOOD RECORD,

537 So. Dearborn St., Chicago.

NOTICE

All persons are hereby warned against accepting or giving credit on account of any guarantees or letters of credit purporting to have been signed and given by J. G. Calvert or J. G. Calvert, vice-president of the National Bank of Jersey Shore, Jersey Shore, Pa., as proceedings in lunacy are now pending against the said J. G. Calvert, in the Court of Common Pleas of Lycoming County, Pennsylvania, to Number 57, June term, 1913. MRS. JOSEPHINE S. CALVERT.



For sale by HARDWOOD RECORD,

537 S. Dearborn St., Chicago, Ill.
50 CENTS EACH.

CHICAGO

Osgood & Richardson
935 Peoples Gas Bldg.

**NORTHERN AND SOUTHERN
HARDWOODS**

Chicago Agents: LAMB-FISH LUMBER CO.

**FRED D. SMITH
HARDWOOD LUMBER**

1337-1343 North Branch St. CHICAGO

E. H. KLANN

Cottonwood, Gum, Oak, Ash, Cypress, Yellow Pine, Dimension Stock

819 FISHER BLDG.

HAR. 1187



**99% PURE
SILICA
OR SILEX FOR WOOD FILLERS**
TAMMS SILICA CO., 19 So. 5th Ave., Chicago

Gerlach Modern Machines
Produce the Cheapest and Best
**COOPERAGE STOCK
and BOX SHOOKS**
Circular, Band and Cylinder Saws
SAW AND LOG TOOLS
THE PETER GERLACH CO., Cleveland, 6th City, U.S.A.

**If you are not a subscriber
to HARDWOOD RECORD and have a suspicion that
you would like to see a copy, it
is yours for the asking.**

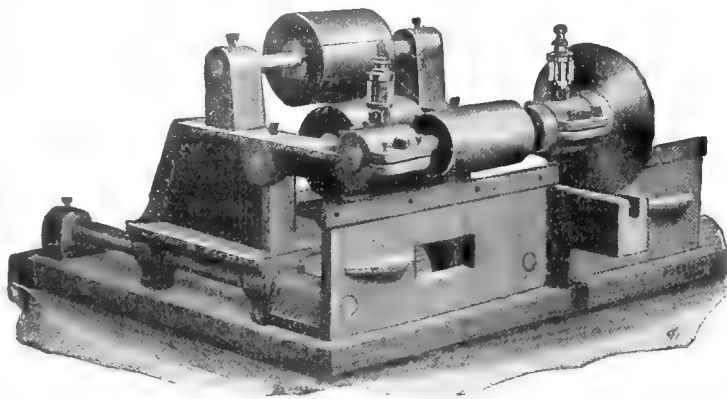
COUNTERFEIT CHECKS

are frequent
except where
our

Two Piece
Geometrical
Barter Coin
is in use, then
imitation isn't
possible.
Sample if you
ask for it.

S. D. CHILDS
& CO.
Chicago
We also make
Time Checks,
Standards and
Log Hammers.





BUTTING SAW

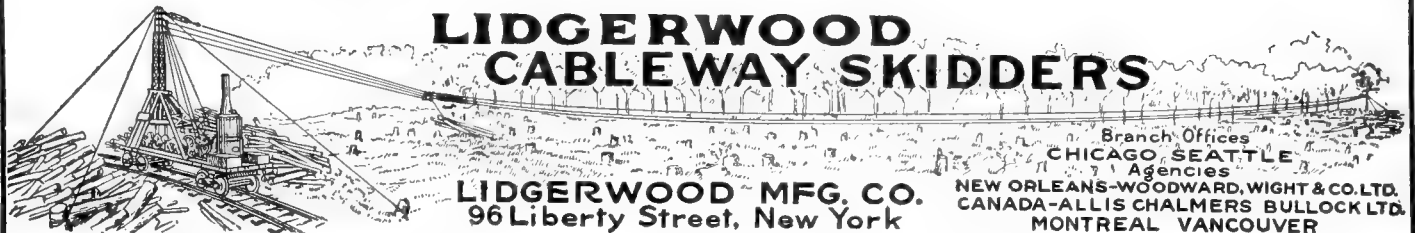
for
Flooring Factories

For cutting out defects and making square and smooth ends for end-matching machines. Used by the largest producers. Write for particulars and prices.

Manufactured by
Cadillac Machine Co.
CADILLAC, MICH.

The CHEAPEST HARDWOOD LOGGING

IS DONE WITH



LIDGERWOOD CABLEWAY SKIDDERS

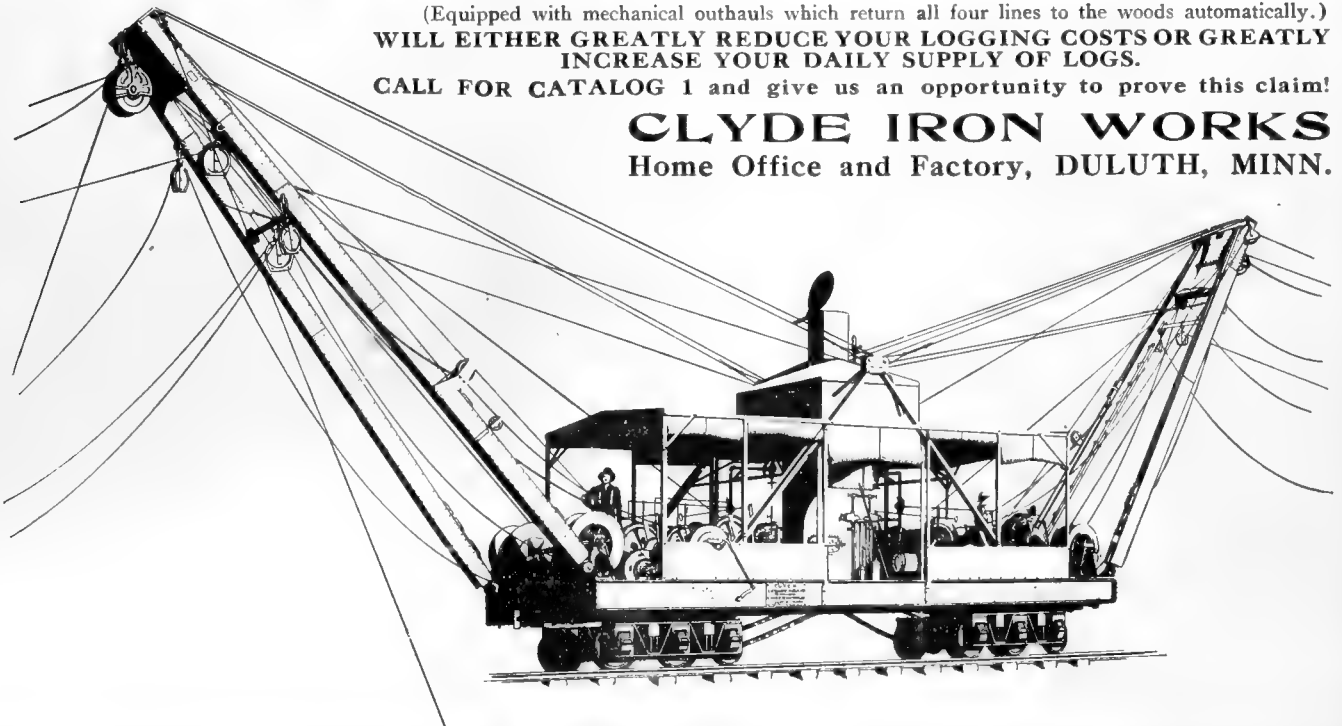
LIDGERWOOD MFG. CO.
96 Liberty Street, New York

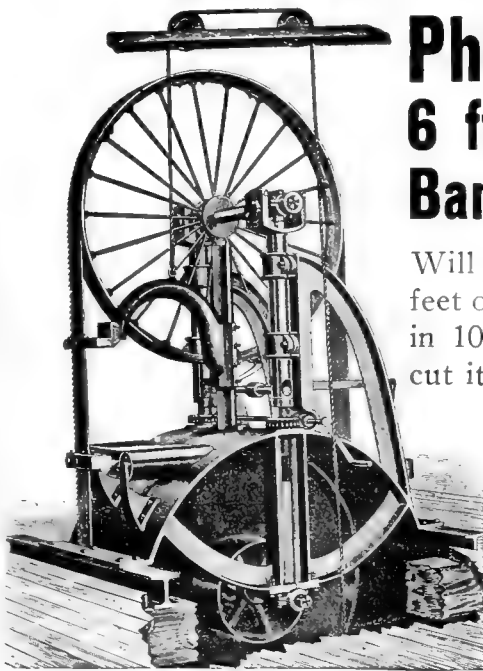
Branch Offices
CHICAGO, SEATTLE
Agencies
NEW ORLEANS-WOODWARD, WIGHT & CO. LTD.
CANADA-ALLIS CHALMERS BULLOCK LTD.
MONTREAL VANCOUVER

THIS FOUR LINE CLYDE SKIDDER

(Equipped with mechanical outhauls which return all four lines to the woods automatically.)
WILL EITHER GREATLY REDUCE YOUR LOGGING COSTS OR GREATLY INCREASE YOUR DAILY SUPPLY OF LOGS.
CALL FOR CATALOG 1 and give us an opportunity to prove this claim!

CLYDE IRON WORKS
Home Office and Factory, DULUTH, MINN.





Phoenix 6 ft. Pony Band Mill

Will cut 30,000 feet of 1" lumber in 10 hours and cut it good.

Nearly 200 of these mills sawing wood in the U. S. A.

PRETTY GOOD RECOMMENDATION, ISN'T IT?

MODERATE PRICE

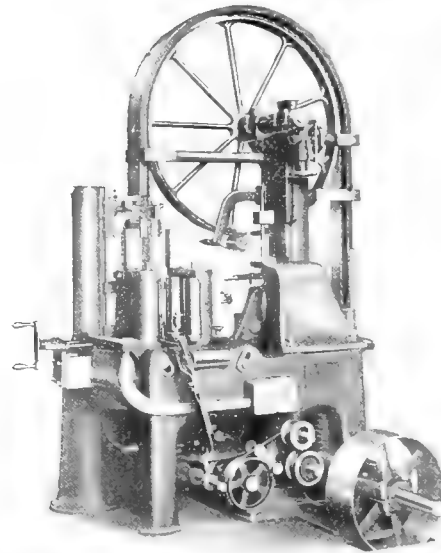
PHOENIX MFG. CO.

EAU CLAIRE

WISCONSIN

GENUINE PLEASURE

A Specially Not a Like Line



Ideal Band Resaw

Martinsville,
Indiana,
Oct. 11, 1912.

It is always ready for work and capacity is only limited by the operator and off-bearer.

It is a genuine pleasure to have this machine in our shop.

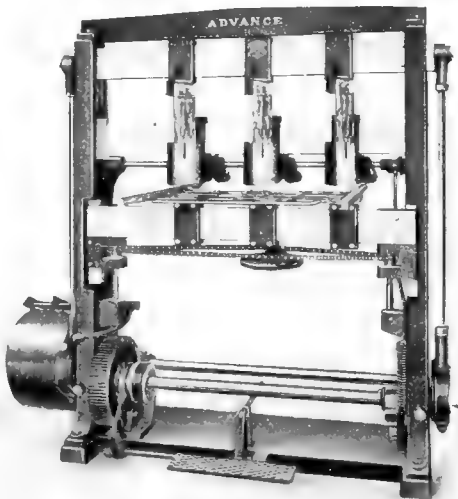
Very respectfully,
THE DAVIS COOPERAGE COMPANY

Wm. B. Mershon & Co.

SAGINAW

MICH.

Wire Stitching Machinery



FOR

Crates, Veneer and Resawed Lumber, Boxes, Also Wire and Metal Bound Boxes

FRUIT PACKAGES, BASKETS, FIBER SHIPPING CASES, PAPER BOXES AND SPECIAL PURPOSES

ASK FOR CATALOGUE

Manufactured by

SARANAC MACHINE COMPANY

BENTON HARBOR,

MICH., U. S. A.

**ELEPHANT
RUBBER**

BELTING

AIR DRILL AND AIR TOOL

HOSE

**STEAM
WATER
SUCTION**

EXTRA QUALITY

Recommended for hard service and guaranteed to do the work

SELLING AGENTS

CRANE COMPANY - - ALL BRANCHES
STANDARD EQUIPMENT CO., MOBILE, ALA
ALBANY MILL SUPPLY CO., ALBANY, GA.



**THE MECHANICAL
RUBBER COMPANY**

(Chicago Rubber Works)

**307 W. Randolph Street,
ESTABLISHED 1882**

CHICAGO



WISCONSIN



WHERE THE FINEST NORTHERN HARDWOODS GROW

WE MANUFACTURE MICHIGAN
HARDWOODS AND HEMLOCK.
MILLS ELECTRICALLY
DRIVEN; STOCK
BAND SAWN

Have in Shipping Condition

BIRCH: NO. 2 AND BETTER, 4/4 to 12/4
ASH: NO. 2 AND BETTER, 4/4 to 12/4
ELM: NO. 2 AND BETTER, 4/4 to 12/4
BASSWOOD: NO. 2 AND BETTER, 4/4 to 12/4

WE are well equipped for manufacturing
special sizes, wagon stock, skids, ties, etc.

THE C. A. GOODYEAR LUMBER COMPANY

Office and Mill
TOMAH, WISCONSIN

Logging Camp
BLUE BILL, MICHIGAN

Wood-Using Factories

CAN OPERATE to the best advantage in
WAUSAU, the point of greatest lumber pro-
duction in Wisconsin.

A TRIBUTARY SUPPLY of Hemlock,
Tamarack, Pine, Cedar, Ash, Basswood, White
and Yellow Birch, Hard and Soft Maple, Rock
and Soft Elm, furnishes timber suitable for
almost every product in which wood is the
raw material.

WAUSAU has cheap power, good freight
service, dependable labor, the best of modern
living conditions in a healthful climate, and
excellent factory sites obtainable on the most
reasonable terms. This is why Wausau is
"The Place for Wood-Using Factories."

WRITE FOR our books, "Wausau, a Good
Place to Come," and "Factory Facilities in
Wausau."

*The Wausau Advancement
Association*
Wausau, Wisconsin

SAWYER GOODMAN CO.

MARINETTE, WIS.

Mixed Cars of Hardwood, Bass-
wood, White Pine and Hemlock,
Cedar Shingles and Posts

**We make a specialty of White Pine Beveled Siding and
White Pine Finish and Shop and Pattern Lumber**

Both Ends and the Middle

HARDWOOD RECORD reaches most
everybody who produces mar-
kets and consumes Hardwoods.

Nothing But Hardwoods

If you want to reach the wholesale consumers of hardwood lumber throughout the
United States, a HARDWOOD RECORD advertisement will do it for you.

If you want to reach the hardwood manufacturers of the United States, a HARDWOOD
RECORD advertisement will do it for you.

The HARDWOOD RECORD represents high-class, special, class circulation, with a
minimum of waste circulation.

Ask any HARDWOOD RECORD advertiser for experience on results.

VENEERS AND PANELS

Ahnapee Veneer & Seating Co.

HOME OFFICE, FACTORY AND VENEER MILL, ALGOMA, WIS.
VENEER AND SAWMILL, BIRCHWOOD, WIS.

We manufacture at our Birchwood plant single ply veneers of all native northern woods and deliver stock that is in shape to glue.

From our Algoma factory, where we have specialized for twenty years, we produce panels of all sizes, flat or bent to shape, in all woods, notably in Mahogany and Quarter-Sawed Oak.

We make no two-ply stock, and do not employ sliced cut quartered oak. Our quartered oak panels are all from sawed veneer.

Every pound of glue we use is guaranteed hide stock. We do not use retainers. Our gluing forms are put under powerful screws and left until the glue has thoroughly set.

If you seek a guaranteed product that is the best, based on results accomplished by most painstaking attention and study of every detail, combined with the use of the best stock and an up-to-date equipment, our product will appeal to you.

If you are a "price buyer" we probably cannot interest you.

KIEL WOODEN WARE CO.

WHEN IN THE MARKET FOR ROTARY CUT

BIRCH
BASSWOOD
OAK
ASH
ELM

VENEER

Write Us

WISCONSIN

KIEL
FACTORY AND MAIN
OFFICE

MELLEN
VENEER AND HEADING
MILL



WE manufacture all kinds of panels from the various woods usually used for that purpose.

We lock-joint all our lumber cores, and use every other means of making our product as perfectly as it can be made.

We ask only that you send your inquiries—our stock will almost sell itself after you have seen it.

AUTO DASHES, TOPS and PANELS
CHAIR BACKS and SEATS

THE WISCONSIN SEATING CO., New London, Wis.

HOWARD HANSON, President

THOMAS A. TURNER, Secy. and Treas.

THE HANSON-TURNER COMPANY

MANUFACTURERS OF

ROTARY CUT VENEER AND THIN LUMBER

ELM
BEECH
CURLY BIRCH

OAK
MAPLE

BIRCH
BASSWOOD
BIRD'S-EYE MAPLE

SPECIALTIES:

DRAWER BOTTOMS BACK PANELS CENTER STOCK
BACKING PIANO PIN BLOCKS BIRCH DOOR STOCK
CURLY BIRCH BIRD'S-EYE MAPLE

OFFICE and FACTORY at WELLS, N. Y.

VENEERS AND PANELS

OUR SPECIALTY

Highly Figured Quarter-Sawed White Oak Veneer



PUTNAM VENEER & LUMBER CO.

ROACHDALE, IND.

H. I. CUTSINGER, Gen'l Mgr.

Custom Mill Work, Storage, Inspection

ON

Foreign Fancy Woods, Mahogany, Cedar, Circassian

We receive the logs, store or warehouse them, manufacture them into lumber, cut or saw veneers, pile and store the product, and ship via any railroad. Also furnish inspection returns on logs or lumber. Can furnish accommodations and economies which it is impossible to secure elsewhere. We always have on our yards parcels of plain and figured African, Mexican and Cuban Mahogany, Circassian Walnut and Cedar logs, placed here for sale by direct foreign shippers, from which advantageous purchases can be made.

Astoria Veneer Mills & Dock Co.

Long Island City, New York

Veneers and Panels with a Reputation

WE manufacture Veneers in all the native woods and for all purposes. Also Built-up Panels in native and foreign woods—three and five-ply—and have established a reputation for furnishing high-grade material. Send us your inquiries and orders and become one of our satisfied customers.

Underwood Veneer Co.

Wausau, Wis.

CIRCISSIAN MAHOGANY
Logs VENEERS Lumber

WE IMPORT WE MANUFACTURE

All Thicknesses of Mahogany
 Ready for Shipment

RICE VENEER & LUMBER CO.
 GRAND RAPIDS, MICH.

ESTABLISHED 1869

Adams & Raymond
Veneer Co.

INDIANAPOLIS, INDIANA
MANUFACTURERS

OF
PLAIN & FIGURED
VENEERS

CIRCISSIAN } WALNUT
 AMERICAN }

QUARTERED OAK

ANY THICKNESS

THE SOUTH

PROMINENT SOUTHERN MANUFACTURERS

ANY REASONABLE OFFER

WILL BUY THE FOLLOWING STOCK:
 DRY—IN FINE CONDITION

6000 feet 3/4" 1s-2s Qrtd. White Oak, 6" & up.
 2700 feet 5/8" No. 2 Com. Qrtd. White Oak.
 5000 feet 5/4" No. 2 Com. Qrtd. White Oak.
 5700 feet 2 1/4" Com. & Bet. Plain White Oak.
 17000 feet 4/4" 1s-2s Qrtd. Poplar.
 7500 feet 4/4" 1s-2s Yellow Poplar 7" & up wide.

3 cars 4/4", 6/4", 2", 2 1/2", 3" and 4" Poplar 1s-2s, 20" & up.
 13000 feet 5/4" Common and Better Poplar, 13" & up.
 1 car 2 1/2", 3" and 4" Common and Better Hickory.
 2 cars 4/4" No. 1 Common Walnut.

We, of course, have a complete stock of Quartered and Plain Oak, Poplar and Hickory, etc., in all grades and thicknesses; and will be glad to have your inquiries for anything you may need.

J. V. STIMSON & CO.

OWENSBORO, KY.

Boice Lumber Co., Inc.

Southern Hardwoods

MAIN OFFICE
 RICHMOND, VIRGINIA

Yards: NORFOLK, ABINGDON, GRAHAM, VA.,
 and NORTH WILKESBORO, N. C.

Louisiana Long Leaf Lumber Co.

Fisher, Louisiana

Diamond



Brand

OAK FLOORING
 A GUARANTEE OF PERFECTION

**IF YOU WANT THE BEST SYSTEM OF ACCURATELY TALLYING AND
 RECORDING LUMBER SHIPMENTS OR RECEIPTS**

YOU WILL BE INTERESTED IN

The Gibson Tally Book

This system of tallying lumber is employed by more than two thousand lumber producers, jobbers and wholesale consumers, and is available for tallying lumber, logs, flooring, dimension stock and all other commodities.

Makes three original tallies without the use of loose carbon sheets.

New Catalogue showing twenty-six various forms of tickets sent free on request.

Tally Book Dept., Hardwood Record, Chicago

THE SOUTH

PROMINENT SOUTHERN MANUFACTURERS

CHERRY

1 Car 4/4
Log Run
Mill Cull
Out,

OAK

84,000 ft. 4/4
Log Run
Quartered.

WE HAVE IT

W. W. DEMPSEY

Manufacturer and
Wholesaler of

HARDWOODS**BAND SAWED STOCK**

A LINE BRINGS PRICE BY RETURN MAIL

General Offices
Johnstown, Pa.

New York Office
No. 18 Broadway

CYPRESS

250,000 feet
of 4/4 No. 1
Common &
Better, Old
grading.

SPRUCE

4/4 and 8/4
Clear and
Select, 8/4
Box.

WE MANUFACTURE AND
DEAL IN**TIES, HARDWOOD LUMBER
AND TIMBER**

We want to buy a large
amount of 4/4, 8'—8'6"
Oak from Tie Sides

Hill Bros. Tie & Lumber Company
Charleston, W. Va.

Baker-Matthews Manufacturing Co.

Sikeston, Mo.

**Band Sawn
Southern Hardwoods**

SPECIALTIES

RED GUM, PLAIN OAK

SEND US YOUR INQUIRIES

GARETSON-GREASON LUMBER CO.

1002-1005 Times Bldg.

ST. LOUIS

MANUFACTURERS**Three Mills****Frank Purcell**Kansas City
U. S. A.Exporter of **Black Walnut Logs**

MARK

**FIGURED WALNUT IN LONG WOOD
AND STUMPS**

Our Corps of Inspectors

Intelligent!

Highly Trained!

Conscientious!

Is assurance that you will get what your order
calls for when you buy Gum from us.

**Himmelberger-Harrison
Lumber Company**

Cape Girardeau,

Missouri

Salt Lick Lumber Co.

SALT LICK

KENTUCKY

MANUFACTURERS OF

Eureka
LUMBER

Oak Flooring

Complete stock of $\frac{3}{8}$ " and $\frac{13}{16}$ " in all
standard widths

William S. Whiting

MANUFACTURER AND WHOLESALE

WHITE PINE**BASSWOOD****BIRCH****BUCKEYE****CHESTNUT****MAPLE****POPLAR****OAK**

ASHEVILLE, N. C.



MICHIGAN



FAMOUS FOR HARD MAPLE AND GREY ELM

"Ideal" Steel Burnished Rock Maple Flooring

is the flooring that is manufactured expressly to supply the demand for the best. It is made by modern machinery from carefully-selected stock and every precaution is taken throughout our entire system to make it fulfill in every particular its name—"IDEAL."

ROUGH OR FINISHED LUMBER—ALL KINDS

Send Us Your Inquiries

The I. Stephenson Company - WELLS, MICHIGAN

Von Platen Lumber Co.

Iron Mountain, Michigan

MANUFACTURERS OF

BIRCH BASSWOOD ELM MAPLE

100 M Ft. 4/4 No. 1 and 2 Common Birch.

50 M Ft. 5/4 No. 1 Common Birch.

50 M Ft. 5/4 No. 2 Common Birch.

100 M Ft. 5/4 No. 1 and 2 Common Maple.

100 M Ft. 6/4 No. 1 and 2 Common Maple.

We Solicit Your Inquiries

SHIPMENTS VIA C. & N. W.—C., M. & ST. P.—W. & M.

"Chief Brand" Maple and Beech Flooring

in $\frac{3}{4}$, $\frac{5}{8}$ and 13-16 and 1 1-16 inch Maple' in all standard widths and grades, will commend itself to you and your trade on its merits alone

WRITE US, WE CAN INTEREST YOU

Kerry & Hanson Flooring Co.

GRAYLING, MICHIGAN

For the Better Kind of Hardwoods

write

EAST JORDAN LUMBER CO.

East Jordan, Mich.

ALL THE MICHIGAN HARDWOODS

Makers of

Imperial Brand

MAPLE FLOORING

LATH

SHINGLES

PINE AND

HEMLOCK

FORMAN'S FAMOUS OAK FLOORING

Is made in faultless fashion from the most uniform-colored and even-textured oak produced; worked from Kraetzer-Cured lumber manufactured at our

Heidelberg, Ky., sawmills.

Thomas Forman Company

Detroit : : : : Michigan

S. L. EASTMAN FLOORING CO.

SAGINAW BRAND

MAPLE FLOORING

SAGINAW, MICH.

MORE THAN 2,000 LUMBERMEN

are using the new Gibson Tally Book with its duplicate or triplicate tally tickets. If you haven't seen it, let us send you one with specimen tickets on approval. They solve your shortage and inspection troubles.

HARDWOOD RECORD

CHICAGO

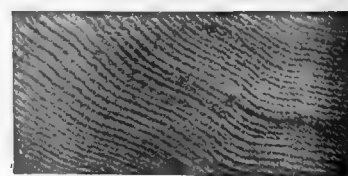


Lumber Dried As Never Before

SEE THE DIFFERENCE

GRAND RAPIDS DRY KILN

GRAND RAPIDS VENEER WKS., SOLE MFRS., MICHIGAN



BUFFALO

The Foremost Hardwood Market of the East

ORSON E. YEAGER

SPECIALTIES:

Oak, Ash and Poplar

932 ELK STREET

ANTHONY MILLER

**HARDWOODS
OF ALL KINDS**

893 EAGLE STREET

**G. ELIAS & BRO.
HARDWOODS**

White Pine, Yellow Pine, Spruce,
Hemlock, Fir, Lumber, Timber, Mill-
work, Boxes, Maple and Oak Flooring

955-1015 ELK STREET

I. N. Stewart & Bro.
Specialties

Cherry and Oak

892 Elk Street

Standard Hardwood Lumber Co.

**OAK, ASH and
CHESTNUT**

1075 Clinton Street

BUFFALO HARDWOOD LUMBER CO.

We want to buy for cash

OAK, ASH AND OTHER HARDWOODS

All grades and thicknesses.
Will receive and inspect stock at shipping point.
Branch yard, Memphis, Tenn.

940 Seneca Street,

BUFFALO

Hugh McLean Lumber Co.

OUR SPECIALTY:

**QUARTERED
WHITE OAK**

940 ELK STREET

T. SULLIVAN & CO.

SPECIALTIES:

Gray Elm, Brown Ash

Pacific Coast Fir and Spruce

2 ARTHUR STREET

The above firms carry large and well assorted stocks of all kinds and grades of Hardwoods, and have every facility for filling and shipping orders promptly. They will be pleased to have your inquiries.

Vansant,

Manufacturers Old-Fashioned

5-8 and 4-4
in Wide Stock,
Specialty

Kitchen &

Soft
Yellow
Poplar

Company

Ashland, Kentucky

EASTERN REPRESENTATIVE, John L. Cochran
601 W. 115th Street, New York City

YOU pay a *little* more for our hardwood lumber than you do for many others', but it's worth *much* more.

With our modern and first-class equipment and expert operatives, we couldn't make bad lumber if we tried to, because the *quality* and *size* of our virgin tough mountain white ash, red birch, yellow poplar, buckeye, maple, red oak, cherry and basswood, averaging less than three logs to the thousand, and 95 per cent sixteen feet, is the best type of hardwood timber growth in the United States, and shows a larger percentage of *firsts*.

If you are a discriminating buyer, let's get acquainted.

LITTLE RIVER LUMBER COMPANY

Townsend, Tenn.

W. H. White Company Boyne City Lumber Company

Mills and General Office: BOYNE CITY, MICH.

Sales Office: BUFFALO, N. Y.

STOCK DRY—STANDARD GRADES—BEST
MANUFACTURE—CAR OR CARGO SHIPMENTS

WE OFFER

All Kinds
OF

Hardwood and Hemlock
Lumber

Hardwood
Flooring, Lath

AND

Dimension Stock

YELLOW POPLAR

MANUFACTURERS OF BAND SAWED

POPLAR
QUARTERED OAK
PLAIN OAK
CHESTNUT
BASSWOOD



SPECIALTY
QUARTER SAWED
WHITE OAK

Coal Grove, Ohio, U. S. A.

LUMBER CO.

Aardwood Record

Eighteenth Year, {
Semi-Monthly. }

CHICAGO, APRIL 10, 1913

{ Subscription \$2.
Single Copies, 10 Cents. }



Lest You Forget

¶ There's no doubt about it, we are Hardwood Specialists in every possible meaning of the term.

¶ When you are next in need of Hardwood, let us prove what we can do—in quality, price and delivery.

OUR STOCK LIST SHOULD BE ON YOUR DESK—
IF IT ISN'T, A POSTAL WILL BRING IT.

J. GIBSON McILVAIN & Co.

1420 Chestnut Street

Philadelphia, Pa.

HOLLOWAY HARDWOODS

*The following Stock is band-sawn
and runs*

60% 14' and 16'

1 car 5/4" x 11" & wider 1s & 2s Plain
Red Oak

10 cars 4/4" x 6" to 12" 1s & 2s Cotton-
wood

5 cars 4/4" x 13" and wider 1s & 2s
Cottonwood

6 cars 4/4" No. 1 Common Cottonwood

Holloway Hardwood Lumber Co.
20 W. Jackson Blvd. Chicago



**Cartier-Holland
Lumber Company**



MR. MANUFACTURER:

We would like to contract our output of
Log Run BIRCH, SOFT ELM and SOFT
MAPLE for 1913, to be cut to order as near
as possible, in accordance with your wishes.

Our estimated cut of each wood would be
about as follows:

100,000' LOG RUN BIRCH

150,000' LOG RUN SOFT ELM

The above will be produced from choice logs



**Ludington
Michigan**



MICHIGAN

FAMOUS FOR HARD MAPLE AND GREY ELM

DIMENSION

MANUFACTURED BY

COBBS & MITCHELL, Inc.

CADILLAC, MICH.

We are manufacturing 1x1—22" to 40" Maple, Beech and Birch in our hardwood flooring factory.

This Stock is Kiln-dried

The Pieces are Straight

The Quality is Clear

Do You Want Such Stock?

Mitchell Brothers Co.

Sales Department

Cadillac, Mich.

March 8, 1913

Dry Michigan Hardwoods

1x4 Basswood No. 1 Common.....	11 M
6/4 Cadillac Gray Elm 1s & 2s.....	7 M
1x6 Maple 1s & 2s.....	22 M
1x9 Maple 1s & 2s.....	17 M
4/4 White Maple, End Dried.....	16 M
5/4 White Maple, End Dried.....	4 M
4/4 Birdseye Maple, End Dried.....	3 M
4/4 Soft Maple, No. 2 Common & Better.....	9 M

WE MANUFACTURE A SPECIAL GRADE OF HARDWOOD FLOORING FOR FACTORY FLOORS

W. D. YOUNG & CO.

MANUFACTURERS

**FINEST
MAPLE
FLOORING**

KILN DRIED, HOLLOW BACKED
MATCHED OR JOINTED
POLISHED AND BUNDLED

Hard Maple, Beech and Birch Lumber
1 TO 6 INCHES THICK WRITE FOR PRICES
BAY CITY, :: MICHIGAN

THE Kneeland-Bigelow Company

Hardwood Manufacturers

100,000 ft. 5/4 1st & 2nds Basswood

All of the above stock is nicely manufactured, being hand sawed, trimmed, and well seasoned. We are prepared to quote attractive prices for this material for immediate shipment.

BAY CITY, MICH.



J. RAYNER VENEERED PANELS

ALL WOODS
SEND FOR STOCK LIST

MAHOGANY LUMBER

CARROLL AVE. AND SHELDON ST.
CHICAGO

PRIMA VERA

(WHITE MAHOGANY)

We have just received a large shipment of Prima Vera logs, and solicit your enquiry for price on any thickness of lumber or veneer, plain or figured.

HUDDLESTON-MARSH LUMBER COMPANY

2254 LUMBER STREET, CHICAGO

Estabrook-Skeeel Lumber Co.

MANUFACTURERS AND DEALERS IN

Maple, Birch, Elm, Basswood, Ash
And Other Northern Hardwoods

In the Market for Round Lots of Hardwood

WRITE US BEFORE SELLING

Fisher Building, . . . CHICAGO

'PHONE HARRISON 1984

SAVE YOUR MONEY BY USING THE

RED BOOK

Published Semi-annually
in February and August

It contains a carefully prepared list of the buyers of lumber in car lots, both among the dealers and manufacturers.

The book indicates their financial standing and manner of meeting obligations. Covers the United States, Alberta, Manitoba and Saskatchewan. The trade recognizes this book as the authority on the lines it covers.

A well organized Collection Department is also operated and the same is open to you. Write for terms.

Lumbermen's Credit Assn.,

ESTABLISHED
1878

608 So. Dearborn St.
CHICAGO

Mention This Paper.

116 Nassau Street
NEW YORK CITY

FLANNER-STEGER LAND & LUMBER CO. MAPLE AND BIRCH FLOORING

of unexcelled manufacture and quality. Also Manufacturers of Basswood, Birch, Elm, Maple and Hemlock.

SEND US YOUR INQUIRIES

MILLS:
BLACKWELL, WISCONSIN

GENERAL SALES OFFICE
1704 STEGER BLDG., CHICAGO, ILL.

CHICAGO

THE GREATEST HARDWOOD MARKET IN THE WORLD

One Reason for Our Success

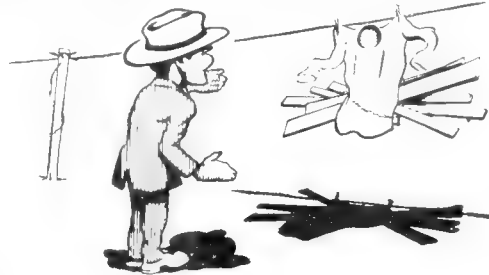
Our Customers Are Satisfied and Come Back

You are going to need Veneer in the near future, so let us have your inquiries for the following woods:

Mahogany	Pine
Circassian	R. C. Red & White Oak
Curly Birch	R. C. Birch
Walnut Butts	And
Yellow Poplar	Quartered Oak
	Sawn and Sliced

Veneer Manufacturers Company
Fulton and May Streets, Chicago, Ill.

15,000,000 FEET OF STOCK ALWAYS ON HAND



A Shirt Tail-Full of Lumber

is no place to look for your requirements. We manufacture 40,000,000 feet ANNUALLY of band sawn Southern Hardwoods. Our lumber is Full Thickness, is of fine average widths and lengths, and we make strictly high grades.

"WISLUMBCO STANDARDS"

100,000 ft. 4 4 x 13 to 17" Box Board Cottonwood.	100,000 ft. 4 4 No. 1 Common Red Gum.
50,000 ft. 4 4 x 9 to 12" Box Board Cottonwood.	50,000 ft. 6 4 Log Run Soft Maple.
100,000 ft. 4 4 x 13" & wider 1st & 2d Cottonwood.	50,000 ft. 4 4 1st & 2nd Plain White Oak.
75,000 ft. 4 4 No. 1 Common Cottonwood.	25,000 ft. 5 4 1st & 2d Plain White Oak.
100,000 ft. 4 4 No. 1 Shop Cypress.	30,000 ft. 5 4 No. 1 Common Plain White Oak.
100,000 ft. 4 4 No. 1 Barn Cypress.	100,000 ft. 4 4 x 13 to 17" Box Board Tupelo.
50,000 ft. 4 4 x 6 to 13" 1st & 2d Sap Gum.	100,000 ft. 4 4 x 6 to 12" 1st & 2d Tupelo.
75,000 ft. 4 4 1st & 2d Red Gum.	

WISCONSIN LUMBER COMPANY
Mills: Huttig, Ark. Deering, Mo. Chicago

Going up—Hardwood Timber

We have the following hardwood and pine timber for sale at prices that have not as yet been advanced with the rise in value on timber lands. For a short time we offer—

150,000,000 FEET HARDWOOD IN SOUTHEAST ARKANSAS — A SPLENDID OPPORTUNITY.

7,600,000 FEET OF HARDWOOD IN SOUTH-WEST ARKANSAS

We also have timber in British Columbia and on the Pacific Coast and Oregon.

For further particulars, address

John C. Spry

Room 1003 Harris Trust Bldg.,

Chicago, Illinois

**WE MANUFACTURE MICHIGAN
HARDWOODS AND HEMLOCK.
MILLS ELECTRICALLY
DRIVEN; STOCK
BAND SAWN**

Have in Shipping Condition

**BIRCH: NO. 2 AND BETTER, 4/4 to 12/4
ASH: NO. 2 AND BETTER, 4/4 to 12/4
ELM: NO. 2 AND BETTER, 4/4 to 12/4
BASSWOOD: NO. 2 AND BETTER, 4/4 to 12/4**

WE are well equipped for manufacturing special sizes, wagon stock, skids, ties, etc.

THE C. A. GOODYEAR LUMBER COMPANY

Office and Mill
TOMAH, WISCONSIN

Logging Camp
BLUE BILL, MICHIGAN

A floor to adore



For thirty-three years Wilce's Hardwood Flooring has been among the foremost on the market and because it stands today "unequaled" is the best evidence that its manufacturer has kept abreast of modern methods and the advanced demands of the trade. To convince yourself of the above statements, try our polished surface flooring, tongued and grooved, hollow backed, with matched ends and holes for blind nailing—you'll find it reduces the expense of laying and polishing.

Our Booklet tells all about Hardwood Flooring and how to care for it—also prices—and is free.

The T. Wilce Company

22nd and Throop Sts. CHICAGO, ILL.

KNOXVILLE

Famous for Finest Type of Poplar, Oak and Chestnut

VESTAL LUMBER AND MANUFACTURING CO. KNOXVILLE, TENNESSEE.

QUARTERED WHITE OAK OUR SPECIALTY

MANUFACTURERS OF
QUARTERED WHITE OAK, PLAIN OAK, POPLAR, WALNUT & TENNESSEE RED CEDAR LUMBER
BAND MILLS AT VESTAL, A SUBURB OF KNOXVILLE. SOUTHERN AND LOUISVILLE & NASHVILLE RAILROAD

H. S. MIZNER,
Pres.

C. C. CANNON,
Vice-Pres.

J. M. LOGAN,
Gen'l Manager

C. B. SWANN,
Sec'y and Treas.

J. M. LOGAN LUMBER CO.

MANUFACTURERS AND WHOLESALERS
HARDWOODS AND PINE
POPLAR A SPECIALTY

Main Office and Yards: Knoxville

Branch Office and Yard:

Bank and McLean Ave., Cincinnati I. M. ASHER, Mgr.

We Want Orders for the following Dry Stock:
WHITE OAK—Plain or Quartered.

RED OAK—Plain or Quartered.

CHESTNUT

BASSWOOD

POPLAR

WHITE PINE

Always carry large well
assorted stock of all
kinds of Hardwoods.

CAN SHIP ON SHORT NOTICE.

Maphet & Shea Lumber Co.

Manufacturers and Wholesalers

OFFICE: 703-705 HENSON BUILDING

Yard: Middlebrook Pike and
Lonsdale Car Line

KNOXVILLE, TENN.

WE WANT TO MOVE

3 cars 4/4 No. 1 Common Poplar, 7" & up
2 cars 4/4 Clear Sap Poplar, 7" & up
1 car 4/4 Select Poplar, 7" & up
1 car 4/4 1 & 2 Red Oak, 10" & up
1 car 4/4 1 & 2 Chestnut
1 car 4/4 No. 1 Common Chestnut

We manufacture: YELLOW POPLAR,
OAK, CHESTNUT, WHITE AND YEL-
LOW PINE, HEMLOCK BARK, ETC.

BAND AND CIRCULAR MILLS—EAST TENN.
MOUNTAIN VIRGIN HARDWOOD STUMPAGE

"THE VERY BEST" Red Birch

Knoxville Veneer Co.

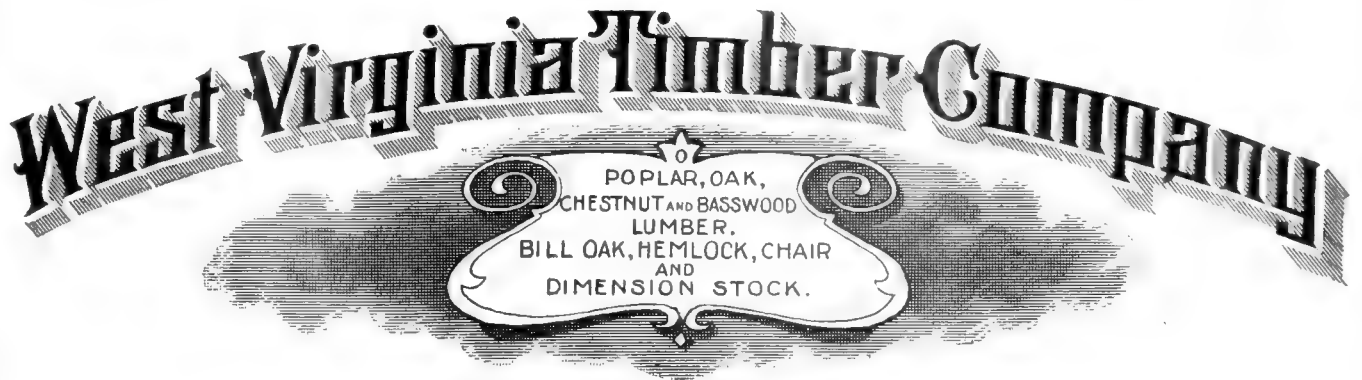
P. B. RAYMOND, General Manager, Knoxville, Tenn.

Kimball & Kopcke Knoxville, Tennessee

Manufacturers and Shippers of

Appalachian Hardwoods

OAK OUR SPECIALTY



CHARLESTON, W. VA.

2 cars 6/4" Common & Better
Chestnut.
2 cars 4/4" 1sts & 2nds Cypress.

5 cars 4/4" 1sts & 2nds Red Gum.
5 cars 4/4" No. 1 Common Red Gum.
5 cars 4/4" 1sts & 2nds Sap Gum.



NASHVILLE



CELEBRATED FOR HIGHEST TYPE TIMBER GROWTH, FAULTLESS MANUFACTURE AND GOOD GRADES

Cherokee Lumber Co.

For the next thirty days we want to move Quartered White Oak and Chestnut and would appreciate your inquiries for attractive prices.

NASHVILLE, TENN.

SECURE BETTER PRICES

AT LESS SELLING COST BY REACHING MORE CUSTOMERS. HARDWOOD RECORD PUTS YOU BEFORE THEM ALL TWICE A MONTH.

ASK US ABOUT IT

We will name very attractive prices on a few cars of each of the following items:

4/4, 6/4, 10/4 and 12/4 1s and 2s Poplar.
4/4 and 8/4 Sap Poplar.
1 1/4", 1 1/2" and 2 1/2" No. 1 Common Poplar.
4/4 No. 1 and Panel Poplar in widths of 12 to 17", 18 to 23" and 24" and up.
4/4 x 13 to 17" Poplar Box Boards.
4/4 1s & 2s Basswood or Linn—very fine.
3/8, 4/4, 5/4, 10/4 and 12/4 1s & 2s Qtd. W. Oak.
4/4, 5/4, 6/4 and 8/4 No. 1 Common Qtd. W. Oak.
6/4 1s & 2s Qtd. R. Oak.
4/4, 5/4 and 6/4 No. 1 Common Qtd. R. Oak.
6/4 and 10/4 1s & 2s Hickory.
4/4, 6/4, 10/4 and 12/4 No. 1 Common Hickory.
4/4, 6/4, 8/4, 10/4 and 12/4 No. 2 Common Hickory.
4/4 1s & 2s Chestnut, also 5, 6 and 8/4.
4/4 No. 1 Common Chestnut.

John B. Ransom & Co.

MANUFACTURERS OF

Hardwood Lumber

Nashville, Tenn.

Paepcke Leicht Lumber Company

CHICAGO

Southern Hardwoods

☐ We offer stock, produced by our band mills, from our own timber.

☐ We control absolutely the manufacture, piling, grading and shipping of our product and are thus able to assure our trade of uniformity of grades and manufacture.

SPECIALTIES:

RED GUM
SAP GUM

RED OAK
WHITE OAK

COTTONWOOD
YELLOW CYPRESS

SOFT ELM
WHITE ASH

Paepcke Leicht Lumber Company

CHICAGO

LAMB-FISH LUMBER CO.



Band Mill and General Offices

CHARLESTON, MISS.

We Produce

Kraetzer-cure
LUMBER

THE LARGEST HARDWOOD MILL IN THE
WORLD—ANNUAL CAPACITY 40,000,000

STOCK LIST—Dry Lumber on Hand April 1, 1913

	3/8	1/2	5/8	3/4	4/4	5/4	6/4	8/4	12/4	16/4
FAS Quartered White Oak.....		25,000	.....	.....	.....	.....	6,000	.....	.....	.....
FAS Quartered White Oak 10" & up.....			.....	.....	12,000	.....	.....	.....	.....	.....
No. 1 Com. Quartered White Oak.....			.....	20,000	150,000	.....	.....	.....	.....	.....
No. 2 Com. Quartered White Oak.....			.....	.....	12,000	.....	.....	.....	.....	.....
FAS Plain White Oak.....		25,000	20,000	.....	50,000	.....	20,000	.....	.....	2,000
FAS Plain White Oak 10" & up.....			.....	4,000	.....	.....	.....	.....	.....	.....
No. 1 Com. Plain White Oak.....			25,000	20,000	300,000	12,000	20,000	.....	.....	.....
FAS Plain Red Oak.....			20,000	.....	100,000	.....	.....	20,000	.....	1,000
No. 1 Com. Plain Red Oak.....			20,000	15,000	30,000	.....	.....	.....	.....	.....
Com. & Better Qrtd. Red Gum.....			.....	.....	25,000	.....	.....	1,000	.....	.....
FAS Circassian Red Gum.....	25,000	25,000	12,000	30,000	30,000	3,000	4,000	6,000	.....	.....
FAS Plain Red Gum.....	500,000	400,000	40,000	400,000	600,000	100,000	75,000	60,000	3,000	.....
No. 1 Com. Plain Red Gum.....	100,000	75,000	60,000	75,000	300,000	60,000	20,000	.....	.....	.....
FAS Sap Gum 13"-16".....			.....	.....	60,000	.....	.....	.....	.....	.....
FAS Sap Gum 18" & up.....			.....	.....	15,000	.....	.....	.....	.....	.....
FAS Sap Gum 6" & up.....	30,000	.....	.....	.....	.....	15,000	20,000	.....	.....	.....
No. 1 Com. Sap Gum 4" & up.....			.....	.....	250,000	.....	15,000	.....	.....	.....
No. 2 Com. Sap Gum 4" & up.....	80,000	100,000	.....	35,000	.....	.....	.....	.....	.....	.....
Shop & Better Cypress.....			.....	.....	100,000	.....	200,000	20,000	.....	.....
Com. & Better Tupelo.....			.....	.....	100,000	.....	.....	.....	.....	.....

OUR LUMBER CONTAINS ALL WIDE STOCK PRODUCED IN MANUFACTURING AND WILL RUN OVER 50% OF 14 & 16 FT. LENGTHS. WE ALSO MANUFACTURE OAK TIMBERS & BRIDGE PLANK—FACILITIES FOR KILN-DRYING & DRESSING

GOOD GRADES **"STEARNS"** **PROMPT SERVICE**
QUALITY LUDINGTON
HARDWOOD SPECIALISTS

When you look over our **HARD MAPLE** you know the reason why they specify the

STEARNS BRAND

Why should you load up with a large stock when we carry the assortment here and can ship promptly when you need it? Just try out the

STEARNS SERVICE



Some of Our Maple Lumber

A Few Items to Spare:

- 5 cars 4/4 No. 1 Com. & Better Saps
- 3 cars 8/4 No. 1 Com. & Better Saps.
- 1 car 8/4 1s & 2s Step Plank.
- 3 cars 4/4 End Dried White.
- 2 cars 5/4 End Dried White.
- 1 car 4/4, 5/4, 6/4 and 8/4 Birdseye.
- 2 cars 12/4 1s & 2s.
- 1 car 10/4 1s & 2s.
- 1 car 6/4 1s & 2s.
- 1 car 5/4 1s & 2s.
- 2 cars 8/4 No. 1 Com, 6" & wider.
- 1 car 6/4 No. 1 Com, 6" & wider.
- 2 cars 5/4 No. 1 Com, 7" & wider.

The **STEARNS**
SALT & LUMBER CO. LUDINGTON, MICH.

BAND SAWN HARDWOODS

WE PRODUCE OUR OWN STOCKS

OAK—Plain and Quartered, Red and White

COTTONWOOD—Ash, Southern Elm, Gum, Soft Maple

A FEW ITEMS WE WANT TO MOVE:

100,000 Ft. 4/4" x 18" to 21" 1st & 2nds Cottonwood.
 150,000 Ft. 4/4" x 9" to 12" Cottonwood Box Boards.
 50,000 Ft. 5/4" x 13" to 17" 1st & 2nds Cottonwood.
 75,000 Ft. 3/8" 1st & 2nds Red Gum.
 41,000 Ft. 1/2" 1st & 2nds Red Gum.

44,000 Ft. 5/8" 1st & 2nds Red Gum.
 86,000 Ft. 3/4" 1st & 2nds Red Gum.
 110,000 Ft. 4/4" 1st & 2nds Red Gum.
 120,000 Ft. 5/8" 1st & 2nds Sap Gum.
 85,000 Ft. 3/4" 1st & 2nds Sap Gum.

WRITE US FOR PRICES

ANDERSON-TULLY COMPANY
HARDWOOD LUMBER **Memphis, Tenn.**

Profit for Both of Us

A cigar dealer of our acquaintance has adopted for his slogan, "If you don't deal here we both lose money"; and likewise, "Doing business with me is like making love to a widow: you can't overdo it."

Both propositions are equally applicable to the Louisville hardwood market, only more so.

You can make money on lumber bought in Louisville, no matter what your requirements are, because Louisville is so situated as to be able to draw the greatest possible variety of lumber from every producing section of importance with the least expense. Hence it is possible to save the money that is necessarily spent in visiting many markets by confining attention to local yards. We have the goods, which are made right and priced right, and will please you whether you are a dealer or a consumer.

By the way, that Ohio river flood is not interfering with business, as conditions are practically normal in this market. Only a few of our members were in the flooded districts, and they are ready to do business today.

The Louisville Hardwood Club

W. P. BROWN & SONS LUMBER CO.
OHIO RIVER SAWMILL COMPANY
LOUISVILLE POINT LUMBER CO.

EDWARD L. DAVIS LUMBER COMPANY
NORMAN LUMBER COMPANY
Mills and Sales Office: Holly Ridge, La.
BOOKER-CECIL COMPANY

THE LOUISVILLE VENEER MILLS

CINCINNATI

THE GATEWAY OF THE SOUTH

BENNETT & WITTE

10 cars 4/4 No. 1 Common Plain Red Oak
 5 cars 4/4 No. 1 Common Plain White Oak
 5 cars 5/8 1sts and 2ds Sap Gum.
 10 cars 3/4 1sts and 2ds Sap Gum
 20 cars 4/4 1sts and 2ds Red Gum.
 10 cars 4/4 No. 1 Common Red Gum.
 1 car 3" Plain White Oak, 1sts and 2ds.

Main Office
CINCINNATI, OHIO

SOUTHERN OFFICE, MEMPHIS, TENN.
EXPORT OFFICE, NEW ORLEANS, LA.

THE MOWBRAY & ROBINSON CO.

CINCINNATI, OHIO

We Want to Move Quick

1" No. 1 Com. Poplar 1" Sap & Select Poplar
 1 1/4" No. 1 Com. Poplar 1 1/2" Sap & Select Poplar
 1 1/2" No. 1 Com. Poplar 2" Sap & Select Poplar
 2" No. 1 Common White Ash

WILL MAKE LOW PRICES TO MOVE QUICK

WE WANT TO BUY

1", 1 1/4", 1 1/2" 1s & 2s AND NO. 1 COMMON SAP GUM
 1", 1 1/2" & 2" 1s & 2s AND NO. 1 COMMON RED GUM
 1" NO. 1 COMMON TUPELO.

SUBMIT US YOUR STOCK SHEETS
WITH BEST CASH PRICES

DUHLMEIER BROS.
CINCINNATI, OHIO

89%

of HARDWOOD RECORD subscribers are owners of steam plants. Eighty-nine per cent are, therefore, buyers of wood-working machinery. There is little percentage of waste circulation in HARDWOOD RECORD for machinery advertisers.

W. E. HEYSER, President WEAVER HASS, V. President
BENJAMIN BRAMLAGE, Sec'y & Treas.

The W. E. Heyser Lumber Company

MAIN OFFICE & YARDS
Winton Place
Cincinnati, Ohio

BRANCH YARDS AND MILLS
West Virginia, Mississippi, Arkansas & Kentucky

12,000,000 ft. High Shipments made
Grade West Vir- direct from our
ginia and Southern own yards and
Hardwoods in mills in straight or
stock at all times. mixed cars.

SEND US YOUR INQUIRIES

The Maley, Thompson
& Moffett Co.

Veneers, Mahogany and
Hardwood Lumber

Largest Stocks

Best Selections

CINCINNATI, OHIO

L. W. RADINA & CO.

DEALERS IN

**POPLAR AND
HARDWOODS**

CINCINNATI : : OHIO

THE EAST

BOSTON

NEW YORK

PHILADELPHIA

WM. WHITMER & SONS

INCORPORATED

Manufacturers and Wholesale-
sellers of All Kinds of"If Anybody Can,
We Can"

HARDWOODS

West Virginia Spruce and Hemlock
Long and Short Leaf Pine Virginia Framing

Franklin Bank Bldg.

PHILADELPHIA

Willson Bros. Lumber Co.

MANUFACTURERS

WEST VIRGINIA HARDWOODS

Oliver Building

PITTSBURG, PA.

WM. E. LITCHFIELD

MASON BUILDING, BOSTON, MASS.

Specialist in Hardwoods

Manufacturers are requested to supply lists of stock for sale

W. R. TAYLOR LUMBER CO.

Wholesalers and Manufacturers
CYPRESS, WHITE PINE, HARDWOODS AND HEMLOCK

1829 Land Title Building, PHILADELPHIA, PA.

JONES HARDWOOD COMPANY

33 Broad Street, Boston, Mass.

Birch, Maple and Beech

"WHITE PINERS"

AMERICAN LUMBER & MANUFACTURING COMPANY

"Old-fashioned" Soft Cork White Pine

"Idaho" White Pine

"Silver" White Pine

Also Yellow Pine and Hardwoods

Manufacturers and Jobbers.

PITTSBURGH, PA.

Saw Mills Designed and Built

Plans and specifications prepared. Construction supervised.
First class heavy millwright work. Entire plants surveyed. Ma-
chinery for complete mills. Fire loss adjustments. Practical
sawmill engineer. Can save you money. Highest testimonials.

C. M. STEINMETZ,

P. O. Box 83, Washington, D. C.

H. D. WIGGIN 89 STATE STREET BOSTON, MASS.

MANUFACTURER HARDWOOD LUMBER

Circular-sawed Poplar, Oak, Chestnut, Basswood, Maple

Mill at Stone Coal Junction, West Virginia

CHARLES HOLYOKE

141 MILK STREET, BOSTON, MASS.

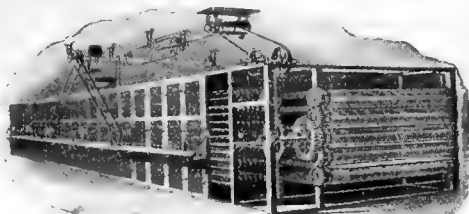
HARDWOODS

Oak Bridge Plank cut to order
for QUICK SHIPMENT

WRITE FOR PRICES

J. S. KENT COMPANY PHILADELPHIA

PROCTOR VENEER DRYER FIREPROOF —AN— UNPARALLELED SUCCESS

No
Splitting
Nor
Checking
No
Clogging
Nor
AdjustingRecom-
mended by
all those
who
have tried
itTHE PHILADELPHIA TEXTILE MACHINERY COMPANY
DEPT. L HANCOCK & SOMERSET STS. PHILA., PA.

If You Knew

What our BULLETIN SERVICE was doing
for your competitor in the lumber business, you'd
not only want the service yourself, but YOU'D
HAVE IT.

Let Us Tell You About It.

Hardwood Record :: Chicago

THE EAST

LEADING MANUFACTURERS AND JOBBERS

LET us talk to you about the plain and quartered oak that made Indiana famous. It's the kind we make to-day.

Wood-Mosaic Co., New Albany, Ind.

HARD MAPLE

When the quality of being hard is required in Maple, Vermont or Adirondack stock should be specified. Maple will not grow harder for us than other people, but it certainly does grow harder in this section of the country than elsewhere.

WE CAN MAKE PROMPT SHIPMENTS.

GEO. WEBSTER LUMBER CO.

21 Besse Place, Springfield, Mass.

PALMER & PARKER CO.

TEAK MAHOGANY EBONY
ENGLISH OAK DOMESTIC
CIRCASSIAN WALNUT VENEERS HARDWOODS
103 Medford Street, Charlestown Dist.
BOSTON, MASS.

BEECHER & BARR

OAK CHESTNUT POPLAR
WHITE PINE, YELLOW PINE AND HEMLOCK
INTERIOR TRIM. HARDWOOD FLOORING.
442 LAND TITLE BLDG. PHILADELPHIA, PA.

WISTAR, UNDERHILL & NIXON

REAL ESTATE TRUST BUILDING, PHILADELPHIA, PA.

QUARTERED WHITE OAK

NICE FLAKY STUFF

We Know How to fill your orders for all kinds of HARDWOODS, WHITE PINE, YELLOW PINE, SPRUCE, HEMLOCK, CYPRESS, HARDWOOD FLOORING.
Give us a trial.

THOMAS E. COALE LUMBER COMPANY
FRANKLIN BANK BUILDING, PHILADELPHIA, PA.

For Quick Shipment 2 Cars 4/4 No. 1 Common and Better Chestnut
1 Car 6/4 No. 1 Common and Better Chestnut
1 Car 8/4 No. 1 Common and Better Chestnut
3 Cars 5/4 Sound Wormy Chestnut

Inquiries Promptly Answered

DANIEL B. CURLL, REAL ESTATE TRUST BLDG., PHILADELPHIA, PENNA.

89%

of HARDWOOD RECORD subscribers are owners of steam plants. Eighty-nine per cent are, therefore, buyers of wood-working machinery. There is little percentage of waste circulation in HARDWOOD RECORD for machinery advertisers.

Hardwood Record's

strongest circulation is in the region where things are made of wood—WISCONSIN, MICHIGAN, ILLINOIS, INDIANA, OHIO, PENNSYLVANIA, NEW YORK and the East. **It's the BEST sales medium for hardwood lumber.**

R.E. Wood Lumber Company

☞ Manufacturers of Yellow Poplar, Oak, Chestnut, Hemlock and White Pine.

☞ We own our own stumpage and operate our own mills.

☞ Correspondence solicited and inquiries promptly answered.

GENERAL OFFICES:
CONTINENTAL BUILDING.

Baltimore, Maryland

CYPRESS LUMBER

1s and 2s: 5/4"....	21845	Selects: 8/4".....	2620
6/4".....	8000	Shop: 5/4".....	715
8/4".....	3220	6/4".....	13925
Tank: 8/4".....	8360	8/4".....	4340
Selects: 5/4".....	39320	Common: 5/4".....	142370
6/4".....	11500	6/4".....	50925

RUSSE & BURGESS, Inc.
Memphis, Tennessee

POPLAR

4/4 to 12/4, All Grades

We also manufacture Oak and Gum

If you appreciate quality and service,
we will hold your business

Faust Bros. Lumber Co.

SALES OFFICE:
CHICAGO, ILL.

MAIN OFFICE:
PADUCAH, KY.

E. F. PERRY
Manager

LOUIS H. PARKER
Asst. Manager

ESTABLISHED 1892

Lumber Underwriters

Every Kind and Form of

FIRE INSURANCE

FOR LUMBERMEN

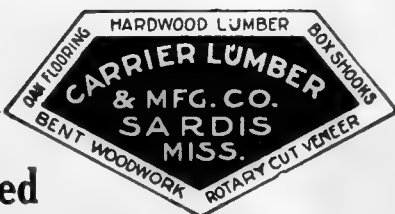
66 Broadway

New York

OAK FLOORING

Kiln-
Dried

Polished



Hollow
Backed
and
Bundled



Table of Contents



COVER PICTURE:—A Trout Stream in the Smokies.

REVIEW AND OUTLOOK:

General Market Conditions.....	15
Next to Nature.....	16
Flood Problems.....	16
Forestry Work of the Pennsylvania Railroad.....	16
Canada's Lumber Output.....	17
An Extravagant Disease.....	17
Mechanical Properties of Wood.....	17
Foreign Tariff Information.....	17
Forthcoming N. H. L. A. Meeting.....	18
The New Tariff Law.....	18
Imports and Exports for February.....	18
The Floods and Collections.....	18
Liverpool Mahogany Sales.....	18
Continuance of Box Hearing.....	18

CARTOON:—Help!

SPECIAL ARTICLES:

Profitable Lumber Advertising.....	20
Theory and Practice of Discounts.....	21
Wood-Using Industries of Connecticut.....	22-23
Lumber Transfer Buggies.....	23
Second Growth Defined.....	24
More Hardwoods in the Home.....	24-25
The Filer and the Sawyer.....	25
Three Unusual Trees.....	26
More Efficient Utilization.....	27-30
Forest Products of Canada.....	30
Big Holdings of a Scarce Wood.....	31
The Flood Situation.....	32-33
The Oldest Living Thing.....	33
THE MAIL BAG.....	34
MISCELLANEOUS CLUB AND ASSOCIATION MEETINGS.....	34-35
NEWS MISCELLANY.....	34-38
HARDWOOD NEWS NOTES.....	38-45
HARDWOOD MARKET.....	45-49

SUBSCRIPTION TERMS: In the United States and its possessions, and Canada, \$2.00 the year; in foreign countries, \$1.00 extra postage.

In conformity with the rules of the postoffice department, subscriptions are payable in advance, and in default of written orders to the contrary, are continued at our option.

Instructions for renewal, discontinuance, or change of address, should be sent one week before the date they are to go into effect. Both old and new addresses must be given.

Both display and classified advertising rates furnished upon application. Advertising copy must be received five days in advance of publication dates.

Entered as second-class matter May 26, 1902, at the postoffice at Chicago, Ill., under act of March 3, 1879.

ICHABOD T. WILLIAMS & SONS

**Foreign and Domestic Woods
In Logs, Lumber and Veneers**

11th Ave. and 25th Street
NEW YORK

910 So. Michigan Avenue
CHICAGO



Hardwood Record



Published in the Interest of the American Hardwood Forests, the Products thereof, and Logging, Saw Mill and Wood-Working Machinery, on the 10th and 25th of each Month, by

THE HARDWOOD COMPANY

Henry H. Gibson, Editor and Manager
Edwin W. Meeker } Associate Editors
Hu Maxwell }

Entire Seventh Floor Ellsworth Building
537 So. Dearborn Street, CHICAGO
Telephones: Harrison 8086-8087-8088

Vol. XXXV

CHICAGO, APRIL 10, 1913

No. 12



Review and Outlook



General Market Conditions

AN ACCURATE ANALYSIS of market conditions and developments during the past two weeks and of the effect of such developments on trade in the immediate future is difficult, because of the many events which have transpired having a direct bearing on lumber production, transportation and consumption. The one event, of course, which will have the strongest significance in the lumber trade is the devastating flood condition which has been felt throughout the entire middlewest hardwood producing and consuming territory. Perhaps the most notable feature of this flood is the fact that it was strongest and did the most damage in the consuming territory rather than as usual in the producing sections of the country. As a direct consequence of this, a vast number of hardwood consuming plants were shut down for days and probably it will be a considerable period before they will have straightened things out sufficiently so that they can resume normal operations.

As a further consequence of the floods in the consuming territory, a vast quantity of lumber in consumers' yards has been flooded and by silt and sand rendered useless for the purposes for which it was intended.

Thus on the one hand we are faced with the condition which takes these factories entirely out of the market for a considerable period, cutting off a goodly percentage of the total hardwood consuming field; and on the other hand, these same consuming factories are faced with the necessity of immediately filling a considerable void caused by stock which has been rendered worthless by high water. Most of these consuming factories, furthermore, produce articles of household furnishings such as furniture, tables, etc., immense quantities of which stock was destroyed in the floods. This will cause an immediate and enormous demand for a new supply. The logical place, it seems, to secure these articles is from the territory adjacent to the flooded areas. Hence, it seems probable that because of this accentuated demand the furniture, the table and other factories in the flooded territory will be more than normally active. When in addition to this is considered the fact as stated, that they lost a considerable quantity of lumber they already had on hand, it would appear to be quite evident that the temporary loss resulting from the removal of these factories from the purchasing field temporarily, is much more than offset by the increased demand resulting from flooded conditions. The natural conclusion is that these conditions will result in very materially strengthening market values on hardwoods.

A further condition must be considered also, which will have an equally strong bearing on market prices. Probably the heaviest

sufferers of all the industries affected by the floods are the railroads. In several cases complete lines were swept away, and every system or individual company maintaining railroad service in the flooded territory was affected to a large extent. Bridges were swept away, stations demolished, trackage utterly ruined. Hence, the railroads are facing the immediate necessity of rebuilding these various structures including buildings, trestles, bridges, tracks and all kinds of structures. The effect of this condition is not theoretical, as an acute demand has already been noted on the part of the railroads. In fact, so anxious are they to secure stock for immediate reconstruction that they are paying fabulous prices for almost any kind of green bill stuff and timbers. The result of this will be that vast quantities of timber, instead of being turned into lumber as under ordinary conditions, will be absolutely taken out of lumber production and will entirely be cut into bill stock, construction timbers, and similar stuff needed by the railroads for immediate use.

Hence, a still further reason is seen here why lumber must necessarily be strong because of the floods. In addition to this, of course, a very apparent condition is affecting the home builders themselves. While the average home builder affected by the flood is not so well able to recuperate as a railroad corporation, still a great many of them are, and those that are not will be backed by outside parties or will be supplanted by outside parties who will furnish the necessary capital to finance the reconstruction of the homes throughout the flooded district. This will undoubtedly result in a tremendous increase in lumber demand.

Thus it can be immediately seen that there is only one possible trend of lumber conditions,—the demand will increase; values will rise. Northern hardwood producing and distributing sections not affected by the floods have already felt this condition.

When it is considered that under normal conditions, had the floods and cyclones not occurred, the demand would have continued in excess of supply, the position of the lumber trade is still further strengthened. One of the most difficult conditions to overcome as affecting the flooded territory particularly, has been the matter of shipping stock in or out. Transportation service has, of course, been practically nil, although at this time it is getting back again to somewhat normal conditions.

There is every reason to believe that these unusual conditions will result in a material detriment to logging operations. Loggers have already been seriously affected by high water, and as a consequence there is a probability that production will be reduced considerably. Production, of course, ceased entirely at those mills which were flooded, or whose sources of log supply were entirely cut off. Even if these mills resume on a normal basis and

continue so with an average quota of logs, the loss in operating days will have a very serious effect on the total hardwood production in southern hardwood territory.

It is probable then that the next few weeks or months will see hardwood producing plants either forcing drying or shipping partly dried stock. This state of affairs even now prevails in some items, and with the new conditions it will be the rule rather than the exception.

Spring has come all over the country, and with it the usual building activity, which this year seems to be abnormal.

Next to Nature

THE COVER PICTURE which illustrates this issue of **HARDWOOD RECORD** has in it the call of the wild. During the shut-in months of the winter the town and the city are quite satisfactory, but when the shortening noontime shadows announce that summer is on the way and due to arrive within a few weeks, the woods are filled with temptations which are hard to resist.

The picture represents a trout stream in the basin of the Middle prong of the East fork of Little River, Sevier County, Tennessee. The scene is included in the holdings of the Little River Lumber Company of Townsend, Tenn. It lies near the center of a tract of 85,000 acres which the government recently purchased for incorporation in the series of national forests which will ultimately include most of the elevated watersheds of the southern Appalachian ranges. The government's purpose is to save and restore, by checking forest fires, and giving nature a chance to bring back the forest growth which has been partly or totally destroyed over considerable areas. There is no need of any restoration in the choice nook shown in the picture. The work of nature has not been disturbed in that place, but many other places have not been so fortunate.

The scene is typical of many localities among the high mountains. It is a hardwood forest, rich, rugged and restful. The largest tree is a veteran yellow poplar, its roots among the rocks, and its crown not visible in the picture, but it may be taken for granted that its limbs expand in the sunlight above the tops of the trees with which it is associated. The leaning tree which hangs over the waterfall appears to be a birch, a tree which flourishes very well in the shade. Although it is not possible to identify in the picture all the trees in sight, it is not improbable that twenty or thirty kinds are visible in that small area—a larger number of species than grow naturally in the whole continent of Europe.

The streams that flow down those mountain slopes are perennial. They are fed by springs which never run dry. Rains are copious, and between showers the skies are blue, the air is fresh and nature is seen at her best.

Flood Problems

THE RECENT DESTRUCTIVE HIGH WATERS have renewed the agitation for measures to prevent floods, but it is much easier to agitate than to devise practical measures on a scale large enough to accomplish the desired results. Whenever six inches of rain falls in thirty-six hours over several thousand square miles, there will be a flood, and it is beyond man's power wholly to prevent it. The amount of water is so great that no artificial means can be devised for taking care of it, and rivers will overflow. However, it is possible to do something to help the situation. If levees had not been built along the lower Mississippi river, much of the fertile land along that stream would be practically useless. It is, therefore, apparent that it is possible to do something, and the question now is, how much can be done.

Three methods of handling floods are advocated. First, improve forest conditions on the upper slopes of mountains; second, strengthen levees and clear channels in the lower courses of streams; third, store storm water in enormous reservoirs, thus holding it back until the crest of the flood has passed. Each one of these methods has its limitations. Land of great value for agriculture cannot be turned back into forests; the construction of reservoirs of large size must necessarily take broad valleys, most

of which are already occupied by railroads, towns and cities; and there is a limit beyond which levee building cannot go. All that can be done by man's ingenuity is to work within the limits set by circumstances.

The worst part of the flood occurred in Ohio and Indiana, where most of the deforesting was done long ago. Conditions in that respect have not greatly changed in recent decades, and for that reason the flood cannot be accounted for by forest destruction in late years. Had the flood occurred in the southern Appalachian region, deforestation of mountain slopes would have been charged directly with the responsibility.

The three methods of flood prevention can be combined. Even in Ohio and Indiana a good many hillsides ought to be growing trees instead of corn. The forest forms a mass of litter, roots and loose soil, which holds back for a time a considerable part of sudden or unusual rainfall. A little of the flood's crest could be taken off in that way. Reservoirs in which much of the sudden runoff may be caught can be built. In case of moderate freshets, these alone might suffice to prevent floods, while in time of extraordinary rain a few feet might be taken off the crest in the lower streams. A foot or two might save millions of dollars. Reservoirs of that kind should be built near the sources of tributary streams, and seldom on the main rivers. This has been done in Europe, particularly in France, and while those countries still have floods, conditions would be much worse but for the reservoirs.

There will now be much discussion of the whole matter. It is understood that bills are being prepared for the consideration of Congress. The real work, in the way of flood prevention, must be done in accordance with plans drawn by engineers, but public approval must stand back of the movement or little will come of it. One of the questions which is already being discussed is whether the government or the states should take charge of the work. There might be a combination, and probably will be. If the building of reservoirs becomes part of the plan, the development of electricity by the stored water will be important. It would be of enormous value near manufacturing centers, and it has not yet been settled whether the states in which reservoirs lie, or the general government should regulate the sale and use of this power.

Forestry Work of the Pennsylvania Company

ABOUT FIVE MILLION TREES, all told, have been planted by the Pennsylvania Railroad Company for forestry purposes. Of this number about one-half are now living. The earliest plantings were of black or yellow locust and it was confidently expected that durable ties and posts could be produced in a comparatively short time. Hopes were blighted, however, by the appearance of the locust borers, which completely riddled the trees with their destructive galleries. A section of the tree trunk attacked by the borers resembles nothing so much as a pile invested with the destructive toredo.

The company has a regular forestry department in connection with the work of timber inspection and timber treating. It maintains a nursery where trees are grown from seed not only for forest planting but also for ornamental purposes. Most of the company's own land suitable to restocking has been planted and considerable attention is now being devoted to reforesting watersheds of various municipal water supplies in which the road is interested.

About seventy per cent of the trees now being planted are hardwoods. The principal species is red oak, since this is a tree which makes rapid growth even on rather poor soil and produces timber desirable for ties after preservative treatment. On some of the better sites black walnut is being tried while along streams and coves some ash is being introduced.

The company formerly had a considerable mileage of Osage orange or bodark (bois d'arc) hedgerows along portions of its right-of-way. It was discovered, however, that tree is a host for the San Jose scale, which has proved so destructive to orchard trees. As a result the hedgerows are being removed at the rate

of about five miles a year and some forty miles remain. It is unfortunate that Osage orange harbors the disease as the trees grow fairly rapidly and will produce fence post material of unsurpassed durability. It is not, though, in any sense a tie proposition as the trees rarely attain large size and are usually very crooked.

Canada's Lumber Output

A REVIEW of the report of Canada's lumber cut in 1911 may be found elsewhere in this issue of HARDWOOD RECORD. It is worth more than a passing thought, and is published at an opportune time, in view of the bill now before Congress to admit lumber into the United States free of duty. An important point is that, except aspen, balm of Gilead, and birch, Canada is cutting very little hardwood; and the amount of softwoods passing through sawmills in that country is considerably less than has been generally supposed. The figures show decline in several places and no great increase anywhere. The sawmill values of lumber are not low enough to make it probable that large shipments will be made into the United States, even if the duty is taken off and Canada does not collect an export duty. The report does not give figures on pulpwood, and that is generally considered to be a resource in which Canada is comparatively rich.

An Extravagant Disease

PIONEERING IN ANY ENTERPRISE is beset with difficulties. Pioneering is expensive. Results are long of consummation, and even eventual success is conjectural. Suggestions of radical changes in systems and processes are looked upon with little favor by the average business man. He resents the suggestion that better systems of accomplishing results than those employed by him for years are possible. He is far from keen to even investigate new methods. These observations apply to business methods in general, but especially so to nearly every phase of lumber production and utilization.

This almost resentment of the introduction of anything new may be termed a disease, which, for the want of a better name, may be called pig-headedness. Every monthly innovation in logging, lumber manufacturing, lumber handling, lumber seasoning, lumber grading and lumber marketing has encountered the same series of difficulties before finding general and appreciative adoption.

The inventor of the muley saw had his troubles in securing its adoption in place of the whip saw. The advent of the circular saw, which supplanted the muley, also had its difficulties, and it was a long time before this type of sawmill came into general use. When experiments first demonstrated that the band saw was an improvement over the circular, the entire lumber manufacturing trade looked at the innovation askance,—but the band finally won out.

The introduction of rotary cutting flooring machines was so resented, that their introduction in Philadelphia in the late 40's, caused nothing less than a riot. But who today would think of making flooring save by the use of machines for this purpose?

The inventors of steam log loaders and steam skidders have also had their troubles, and it is only within the last few years that these wonderful money-saving machines have come into general use. When log loaders were first introduced into timber, the average lumberjack took to the woods. He was "gun-shy" of the outfit, and it took him a long time to get over it.

This has been the history of all innovations looking to increased efficiency and attempts at lowering cost in woods work and lumber production. The disease of pig-headedness has not yet run its course, because it is just as difficult today to introduce innovations in any feature of the trade, as when the attempt was made to supplant the muley with circular.

Perhaps too many lumbermen are too easily satisfied with their own existing systems of accomplishing results. Usually they are very busy men, and they are tied down closely to their particular occupation. A good many of them are not readers of the lumber-trade press, and do not keep up with new suggestions or new inventions. Comparatively few of them are travelers, who

visit the operations of their confreres in the business; and hence, again little opportunity for seeing new and improved methods. They are satisfied with their own way of doing things.

The late Marshall Field had an axiom that is worthy of quotation: "The man who condemns or turns down any proposition without having first acquainted himself with all the details relating thereto, confesses his ignorance and stupidity."

The wise men in the lumber trade confess not only to themselves, but to their neighbors that probably not fifty per cent of ultimate efficiency has been attained in lumber production. There is lots yet coming to lumber manufacturers in learning better methods, better systems, and better details in every feature of the lumber business, from the stump to the delivery of the lumber to the eventual consumer. Hence, it is worth while for every man connected with this industry to investigate and analyze everything that is suggested, that this monumental inefficiency may be corrected, and better and more profitable methods be constantly secured. Pig-headedness does not pay,—enterprising progression does pay.

Mechanical Properties of Wood

THE FOREST SERVICE has published Circular 213 dealing with the mechanical properties of forty-nine woods of the United States, tested in the green condition. The tests were made on 25,000 specimens, in order to reach reliable averages. Work was carried on in co-operation with the universities of Wisconsin, Purdue, Colorado, California, and Washington. The figures obtained are of interest chiefly to builders and architects. Osage orange cut in Morgan county, Indiana, is shown to be the strongest in the list of forty-nine, the mockernut hickory from Webster county, West Virginia, is second; while the stiffest wood is this same hickory from West Virginia, and the second stiffest is pig-nut hickory from the same locality. The weakest is Engelmann spruce from Colorado, and the lowest in quality of stiffness is arbor-vitæ from Shawano county, Wisconsin.

Foreign Tariff Information

MANY AMERICAN MANUFACTURERS AND EXPORTERS are apparently unaware of the facilities in the Bureau of Foreign and Domestic Commerce, Department of Commerce, for answering inquiries concerning the customs duties and customs regulations of foreign countries. Such inquiries are often addressed to American consular officers in foreign countries, as well as to commercial agencies, information bureaus, and foreign consulates in the United States. Replies to inquiries addressed to United States consular officers can be expected only after the lapse of considerable time. In many cases commercial agencies and information bureaus obtain their tariff information either from this bureau's publications or through special inquiries addressed to this bureau, while certain foreign consular officers in the United States frequently refer tariff inquiries to this office. It is therefore evident that direct inquiries concerning tariff information addressed to the Bureau of Foreign and Domestic Commerce should be preferred by American exporters on account of promptness of service as well as accuracy of information.

The tariff work of the Bureau of Foreign and Domestic Commerce is not rigidly restricted to customs duties and customs regulations. The Division of Foreign Tariffs of the bureau gives attention also to closely allied subjects affecting our foreign commerce, such as the internal revenue laws of foreign countries, the regulations for commercial travelers soliciting business abroad, and the requirements of foreign countries for consular invoices, merchandise-marks, standards of purity, and the like. The United States diplomatic and consular officers report on these subjects, and translators and other assistants in the Bureau of Foreign and Domestic Commerce examine carefully the official publications of the foreign governments in order that all information regarding foreign tariffs and these allied subjects may be kept up-to-date.

The answering of specific inquiries concerning customs rates and regulations has come to be an important part of the tariff work

of the bureau. The information desired is so varied in character that special statements continually have to be compiled. To facilitate the compilation of such statements and to insure accuracy, inquiries should invariably be precise and detailed both as to the nature of the article and the particular countries in which the inquirer may be immediately interested. In foreign countries many articles are subject to customs duty merely on the basis of the component material, and the inquirer should always mention the component material as well as the nature and use of his products. When such detailed description is given, the bureau is the more readily enabled to indicate the foreign rates of duty.

The New Tariff Law

THERE IS EVERY PROSPECT that a new tariff law will very soon be enacted by Congress, which will eliminate entirely the duties imposed on a large number of necessities of life, and materially reduce the duties on many others. It goes without saying that the business of the country will have to readjust itself in some particulars to the situation presented by this possibly quite drastic legislation. Lumber practically will go on the free list, as the duty on all rough lumber other than cabinet woods will be removed, while the duty on the latter will be reduced from 12.75 per cent to 10 per cent; but with this advent will follow hundreds of items that go to make up the cost of living, and the general cost of lumber production.

It is thoroughly believable that the net results of this prospective legislation will be distinctly favorable to the lowering of the cost of production of all varieties of lumber in the United States, and will be especially advantageous to the hardwood end of the industry. The prevailing alleged protection to hardwoods under the Aldrich-Payne tariff law has been entirely mythical, as it is very hard to see any protection in a duty levied on woods that by no possible chance enter the United States in competition with local supplies. Therefore, in its eventual results the new tariff law will contribute materially to the lowering of the cost of hardwood production. It will doubtless lower food cost, clothing cost, machinery cost, steel rail cost and in fact everything that enters into the items of expense of lumber production, and as an eventuality, will doubtless lower labor cost. It is thoroughly believable that the hardwood industry can view with complacency the proposed tariff changes.

Imports and Exports for February

THE MONTHLY SUMMARY OF IMPORTS AND EXPORTS shows the total value of imports of wood and manufactures of wood for February, 1913, to be \$4,242,620, as against \$2,817,243 for February, 1912. Manufacturers of lumber, including boards, planks and other sawed lumber, aggregating in value \$845,883, were imported during February, 1913. This is an increase of \$340,000 during the year. The value of the mahogany import during the month of February was \$343,670, as against \$222,160 in February, 1912. The total value of pulp wood imported during that month in 1913 was \$409,986, as against \$280,890 in February, 1912. The total values of wood pulp imported during the same respective periods were \$1,623,362 and \$985,870.

The total export value of all wood and manufactures of wood during February, 1913, was \$9,647,449, as against \$6,700,417 for February, 1912. The total value of all manufactured lumber exported during this month in 1913 was \$5,084,514 and for February, 1912, it was \$3,421,417.

The Floods and Collections

APPALLING FLOOD DISASTERS have visited a large area of Ohio, Indiana and Illinois during the past fortnight, and beyond the consideration of the great loss of life and physical distress of thousands there is a commercial loss of such magnitude that it is yet not estimable. Perhaps the railroads have been the greatest commercial sufferers. Following closely is the loss to lumbermen and the hundreds of manufacturing institutions of which lumber is the basis of consumption.

The territory invaded has been the very center of manufacturing of articles from wood, and outside of the great losses sustained by this interest by direct damage, the loss is amplified by the interruption of business that has obtained. The affairs of hundreds of lumbermen and woodworking industries have been demoralized and it will take months for recovery. The situation undoubtedly will have a far reaching effect on lumber affairs, notably in hardwood. While perhaps few individual losses have been of such a monumental character as to bankrupt the concerns, it will be a long time before many of them will be able to promptly meet their current indebtedness, and hence it is probable that collections from this territory are going to be slow.

This delay in receipts from a territory consuming such a large quantity of hardwoods will reflect on the affairs of many manufacturers and wholesalers, as an interruption of collections from outstanding accounts will naturally upset the financial calculations of many.

Details of the flood disasters will be found elsewhere in this issue.

Liverpool Mahogany Sales

MARCH MAHOGANY SALES at Liverpool were well attended by representatives of large concerns. The catalogues of these sales were chiefly Lagos and Bonin, and while there was a considerable quantity of good wood which realized prices that were even higher than recent averages, there were also plenty of poorer grade logs, the prices of which seemed high in proportion to those realized on the higher class stock. One finely figured log was sold for almost \$12,500. It contained 3,802 feet and sold at 13s 3d. It is one of the largest amounts ever invested in a single piece of wood. It is reported that the outlook for arrivals at Liverpool are very disappointing, and as far as can be seen they will continue to be below normal for some months to come. There will necessarily be no appreciable reduction in price, at least for the next six months.

Continuance of Box Hearing

THE HEARING on the question of freight rate classification as applied to wooden vs. fiber containers, started at Los Angeles in January, in what is known as the Pridham case, is being continued at Chicago. The testimony at Los Angeles was more or less of a summary nature, but it is apparent from the attitude of both sides in the present hearing at Chicago that they will go very much more deeply into the controversy and get down to actual concrete facts pertaining to the advantages and disadvantages of both types of packages.

The Chicago hearing started at the Hotel La Salle in Chicago, April 4, and is not yet completed. So far the fiber box people only have submitted testimony. The wooden box interests have secured a continuance in the hearing to start April 21, at which time they will submit their side of the case.

The present indications are that the matter will work down to a definite basis with the analysis based on actual facts, in which event the wooden box people will surely realize a material advantage.

Forthcoming N. H. L. A. Meeting

PLANs ARE BEING COMPLETED for the annual meeting of the National Hardwood Lumber Association, which will be held at the Hotel Sherman, on Thursday and Friday, June 5 and 6. Plans are being made for the entertainment of even a larger number of visitors than were present at the Chicago meeting a year ago. Chicago's hospitality to the lumber trade is boundless, and it goes without saying that every provision will be made for expeditiously conducting the business of the organization, as well as for the comfort and pleasure of the thousand guests expected.

Quite an important part of the secret of success in the hardwood flooring business is to be found at the dry-kiln end, for without proper drying to start with, no hardwood flooring can be what it should be.



Pert, Pertinent and Impertinent



Hustle and Grin

Smile and the world smiles with you;
"Knock," and you go it alone;
For the cheerful grin
Will let you in
Where the kicker is never known.

Sigh, and you "take in" nothing,
Work, and the prize is won;
For the derry men
With backbone can
By nothing be outdone.

Sing, and the world's harmonious,
Grumble, and things go wrong,
And all the time
You are out of rhyme
With the busy, bustling throng.

Growl, and the way looks dreary;
Laugh, and the path is bright;
For the welcome smile
Brings sunshine, while
A frown shuts out the light.

Haste and fortune awaits you;
Shirk and defeat is sure;
For there's no chance
Of deliverance
For the chap who can't endure.

Kick, and there's trouble blowing;
Whistle, and life is gay,
And the world's in tune
And the clouds all melt away.
Like a day in June.

HELP!



Is engineering science helpless in the face of these constantly recurring and appalling calamities?

Equity

"After all, things are pretty evenly apportioned in this world."

"Eh-yah! A strong minded woman generally has a weak-minded husband."—*Smart Set*.

He Supplied It

Wallie—"How fast the horse is runnin'!"

Teacher—"You forgot the 'g.'"

Wallie—"Gee! How fast the horse is runnin'!"
—*Brooklyn Life*.

Not Qualified

Gibbs—How are lobsters caught?

Bibbs—Don't ask me, I'm no chorus girl.
—*Boston Transcript*.

Matrimonial

Three Germans were sitting at luncheon recently and were overheard discussing the second marriage of a mutual friend, when one of them remarked:

"I'll tell you what. A man what marries de second time don't deserve to have lost his first wife."

Cheaper

Brown—"I wish I belonged to a golf club."
Jones—"You don't need to. Just walk five miles or so, and every twenty or thirty yards hit the pavement a hard whack with your stick and swear."

Changed His Mind

"I thought you said, Grouch, that you would never permit your wife to run an auto?"

"So I did; but she happened to hear me say it."

As It May Happen

The kind-hearted old lady handed the beggar a dime.

"My man, how did you become so poor?" she asked. "What brought you to this terrible stage of poverty?"

"The parcel post, mam," replied the beggar. "You see, I used to be president of an express company."—*Cincinnati Enquirer*.



Profitable Lumber Advertising



FIRST PAPER

Editor's Note

This is the first of a series of six articles on "Profitable Lumber Advertising," which is written by a lumberman who has fully demonstrated his ability to secure substantial profits from lumber trade newspaper advertising, backed by an unusual ability in the preparation of forceful and convincing "copy." The next article will be on the subject of "Writing Copy," and will appear in next issue.

"Business failures continue large. Business men apparently find it impossible to raise their selling prices to make up for increased costs."—Wall Street Journal.

It sounds probable, very much so. Wages are higher, but traveling expenses are a great deal larger than ever before. Where is it all going to end? Either you must meet quotations or you must quit. It seems quite probable that business men are not down to the lowest basis of selling costs and to that reason and also to the fact that many men do not know how to figure these sales costs, many failures are directly attributed. It is safe to say that lumbermen in general are not using modern methods—in fact, it is said that the lumber business is the most backward of any profession—for the lumber business is a profession. It ought to be a science.

Just take the sawmill end of the game—the very basis of the business. Look at the enormous percentage of waste. Under the boiler it goes. When you suggest utilization of waste to the lumbermen, they throw up their hands and say they find no time to bother with it. And so the government has to put up experiment stations and employ experts to find out these things for them. One progressive manufacturer, for illustration, who was not satisfied to see the edgings and cut-offs from his mahogany go under the boiler, spent considerable time and research to see what he could make out of this so-called waste. Today he is making a wood mosaic flooring out of little pieces 1"x1"x½" end-grained, glueing them on a special mat and making a beautiful and everlasting floor. He gets fifty-five cents per square foot for this product. Just think of it—the profits from what used to be waste. It takes only a little thought to uncover some of the possibilities of waste utilization. The trouble with us all is that we are too content with things as they are. Anything out of the ordinary that comes up, we pass by and let someone else worry about. We all know that the waste is a big item of loss. Let us face the problem; get after it hot and think of new ways for turning the waste item into the profit column.

You can all laugh when the writer makes the statement that advertising is the newest method of selling goods at the lowest sales cost; but if you will just stop and think for a minute, you will realize that the steel people saw the opportunity and the concrete people saw the opportunity, and if you will look at the annual reports of the government issue, you will see a steady decrease in the annual consumption of lumber, and a steady increase in the use of both concrete and steel. Why, one cement manufacturer alone spends more in a year for advertising than the combined money spent by every lumberman in the business—every one in the United States—for their annual advertising. That is a very startling statement, but it nevertheless is a fact and can be verified.

One of our best known authorities on the subject of advertising, makes the following statement: "There are only two ways you can increase your business: You must either get new customers or get more business from the old customers. There are only two ways to get new customers. Either sell them what you already have to sell, or provide something else for them to buy. There are only two ways of getting more business from old customers—sell them more of what you are now selling them, or sell them something you are not now selling them.

"Advertising brings new business for what you already have to sell. It even causes you to improve your product or the varieties of your goods and so extend your business. It causes your old customers to buy again, to speak of your wares to others and to

buy other things from you. It forces you to consider how your proposition compares with that of your competitors and so lets in new ideas and policies, all aiming for a larger and more successful business. It makes you build up the efficiency of your selling force to take care of the new business and in turn, helps to develop the old business.

"At every point, then, advertising helps business. It seldom gets credit for all the influence it has in a business, but it is the real cause of a great deal of fundamental improvement in all branches of a business."

That little talk is a good thing to cut out and keep before you. It is one of the truest sayings that has ever been spoken. You have heard of advertising from the reports in the lumber papers and possibly from solicitors and in general they have all dealt with you in the matter of space only. The writer does not blame some of them for the attitude they take—for in past years, they probably have tried to get you to look upon advertising as a strictly business proposition. Advertising from the writer's experience, is even more—advertising is salesmanship in print. It's not a magic art of printer's ink and type, which, after the inserting of it in a small space, brings back success and profits to your door. Advertising is exactly the same as sending a salesman out to sell your goods, or tell the public about them. Look on it in this way. Suppose you make quartered oak. What is your logical trade—trim manufacturers, furniture manufacturers, retail yards and perhaps wholesalers. Pick out the paper or papers that reach these classes of trade. The paper represents your salesman; your advertisement represents the words of his talk. Now that you have that part of it straight, just for a minute think of the present day lumber advertisement. All salesmen in the latter case then (the advertisement) say, "My name is Smith; I sell hardwood lumber; office, Big Ditch, Ind." Mr. Lumberman, how long would you keep a salesman on a pay roll who approached your customers in this way? And yet it is just the effect that most present-day lumber advertisements have on a man reading the paper, and that is why you claim that advertising does not pay. It is true, and it never will pay. For the same reason that is why a great many men whom you put out on the road as salesmen fail to make good—they talk in the same way—they just go in a man's office and say, "My name is Smith, hardwood lumber, Indiana," and then expect to get business. Right here seems the proper place to say that it is absolutely impossible in these modern times to put a man out on the road who has not studied the selling game. As one very prominent sales manager says, "salesmanship is nine-tenths talk and one part the goods." And while that statement may seem rather radical to most lumbermen who have not studied modern methods, it is very true. There is such a thing as psychology, and it is applied in every day business by the scientific salesman as well as the advertising man—in fact, it is a necessity.

The writer does not mean to say that salesmanship is all talk, because knowledge of the goods is one of the prime factors; but it is an absolute impossibility to put out a man who has simply worked in your office or in your mill, and expect him to produce the results or to represent you in the way that he should. It simply cannot be done. The man probably knows nothing of tact or the way in which customers should be handled—it takes a man who has been trained in these features to cover the requirements of a scientific salesman. Advertising and salesmanship go hand in hand. Advertising puts your story before the people at the

lowest possible sales-cost. Just figure (if you think it possible to figure) what it would cost you to send a salesman out to visit five thousand prospective buyers and the time and expense consumed in such an undertaking—then think on the other hand that for simply a cost of from fifty to five hundred dollars you can tell your story to from three to twelve thousand readers (possible buyers) and all at one time, twenty-four times a year, without any other cost except for the space. How many of you have looked on advertising in that light?

To write an advertisement is not the stupendous task that one

would imagine—in fact one of the best advertisement writers in the country today states that all one needs to possess is the ability to tell a story about the goods in plain English and to strictly adhere to the truth about the goods; and that after you have told the story, stop. The writer has spent some years in the study of advertising—he has carried on two campaigns. He has also a few ideas on modern business methods. The idea in writing this series of articles on advertising is to give the layman the first principles of the science as particularly applied to the lumber business.



Theory and Practice of Discounts



There are a good many business customs which appear to have little logical excuse for existence; like Topsy, they just grewed, and probably they will continue in operation until Gabriel's trump. One of these necessary evils is the use of the discount; it has to be granted, without rhyme or reason, and the best that the lumberman or other business man can do is to see that it doesn't wear out its small welcome by bringing in its train a host of petty abuses of one kind and another.

The theory of discount, of course, is that prompt payment is thereby encouraged, and the manufacturer or dealer is enabled to get possession of his money and employ it profitably the more speedily. On this basis, the most that ought logically to be paid for prompt settlement of bills is the banking rate of six per cent; in view of which the prevailing custom of granting the ancient and honorable two per cent, ten days, seems rather foolish.

In most businesses terms are thirty days net, in which the seller in effect pays two per cent for the use of his money for twenty days, certainly a large rate of interest; while in the lumber business, with sixty days net the usual basis of sale, the period covered by the discount, considering it as interest, is fifty days, making a more respectable, but still an inadequate showing. Discounts are too large, and in view of the various disadvantages to which they are subjected in use, it would be well if they could be done away with at one stroke. This seems to be out of the question, but it is probable that the lines could be drawn in so as to make the operation of the custom more favorable to the seller.

The excessive time allowed by the hardwood man to his customer in the settlement of net bills in sixty days is one of the things that should be taken up and could profitably be discussed by the trade. As indicated above, in most lines the limit is thirty days, and there is no reason why a longer period of grace should be granted in the lumber trade. The length of the period is disadvantageous also in that it encourages the purchaser, in case he has not taken advantage of the ten-day period in which to get his discount, to hold up the payment for nearly two months longer, seeing no reason why he should be deprived of the use of the money, if he is not to have an advantage of some kind or other.

With this in view some houses have adopted the plan of permitting a discount of one per cent on bills which are paid within thirty days after arrival. This rate, be it noted, is just double the legal rate of interest, again indicating the disparity between the value of money in the market and in the hands of the purchaser. It must be that the old phrase, "Let the buyer beware," had a companion piece in "Let the seller beware," and that the latter, fearing for the loss of his principal, was willing to grant a disproportionately large discount in order to insure payment. But, granting the risks of business, this idea certainly has no place in modern affairs.

A question which is sometimes debated is whether the discount period should date from the time of the arrival of the invoice or the arrival of the car at the buyer's station. There are a good many arguments in favor of the latter plan, inasmuch as it is hardly fair to expect a customer to discount a bill before he has had opportunity to examine the lumber. However, this is some-

times done subject to correction in case inspection does not tally with the invoice. But it is probable that in a great majority of cases the buyer is permitted to take the discount if he settles within ten days after the arrival of the car, if not after the inspection of the lumber.

A less mooted question is whether or not the buyer should have the privilege of discounting the gross bill when the seller has quoted a delivered price. As a rule, sales are made with the agreement that the discount shall apply to the net only, even though the receiver of the lumber has paid the freight and even though the price quoted applied to delivery. The point is truly made that freight charge itself is not subject to discount; and therefore that to discount a gross bill means to force the seller to accept a definite loss on the part of the price represented by the freight. The argument on the other side is at least specious, in that the price at which the lumber was bought was the delivered price, and that the freight was paid as a convenience to the seller and to enable him to enjoy the use of his money. Few concerns attempt to squeeze out a discount of this small nature, however, though there are one or two hardwood buyers who put a clause to this effect in their orders and decline to purchase under other conditions. Doubtless, however, prices quoted to them are fixed at a point intended to take care of the loss through the application of excessive discount.

It is in the veneer and panel trade that most use is made of this theory, and more than one manufacturer admits that he is compelled to allow discounts on bills which include the cost of transportation. This being the case, it looks as if the thin lumber manufacturers ought to get together on the proposition and make a point of refusing to allow the discount, for it is not justified by general custom nor warranted in the premises.

The lack of uniformity in customs pertaining to discount is regrettable, in view of the fact that any concession in the discount amounts, of course, to reducing the price; though this is something that is not always understood as thoroughly as it should be. And it should also be remembered that prices are fixed on a basis of cost and expense without ordinarily taking into account the fact that the result is to be subject to discount. Thus net profits are nearly always less than had been figured on a basis of theory, because of the fact that the sawmill man, as has been pointed out in *HARDWOOD RECORD* before, is forced to grant discounts and is able to take none; inasmuch as log men are usually wise enough to sell their offerings f. o. b. their own station at a net price which does not permit the buyer to whittle the amount down through the use of a discount. And the log men are right, too.

The worst feature of all, though, is not in granting too much of a concession in the terms of discount, but in not adhering to them strictly after they are made. Collections are invariably poor with lumbermen, and real money looks pretty good to the man who himself has bills to meet and discounts to take advantage of; hence the buyer who is small enough to resort to petty practices is too often permitted to get away with it.

In fact, a large furniture manufacturer told with considerable

glee of a lumberman who had sold him two or three cars of quartered oak. There was some delay in inspection, and a check was sent out about twenty days after the arrival of the cars, carrying an amount which represented the net bill, less two per cent. A cold and polite note came back from the lumberman, who returned the check with the remark that the discount period had expired, and asked that the net amount be forwarded. The buyer, slightly nettled at what he considered too literal an interpretation of the rules, agreed to pay the net amount; but he also decided to wait the full sixty days before settling. The humorous feature of the story, from his standpoint, is that the lumberman wrote a pleading note a few weeks later asking him to send on the check as originally made out, stating that he needed the money pretty badly and would agree to relinquish the amount of the discount.

And there's too much truth in the condition for the story to sound very funny to the average lumberman. It's pretty hard to turn down the money, even though the other fellow has taken a mean advantage and charged off a discount when he wasn't entitled to it; but unless the seller adheres to the terms of the bill of sale he is going to be the victim of every business man who makes his cigar money out of his discounts and pays his dividends by hammering down material prices.

Lumbermen have learned one thing, however, and that is that buyers who don't intend to pay cash, and who have to have three or four months in which to pay for material, should not be allowed

to wait sixty days before giving a note. When it is known that the cash is not going to be forthcoming, a good rule to adhere to is to secure the acceptance immediately after the arrival of the car, thus getting a negotiable instrument at once. Inasmuch as the discount of the note can usually be accomplished without loss, this arrangement is actually better from the standpoint of the seller than that which permits the buyer to pay cash with the discount off in ten days.

In view of the general discussion among business men of the discount question, the following comment from one of the iron trade papers on the custom in the machine tool business is worth quoting:

"A large majority of machine tool builders have abandoned all cash discounts. They do practically all of their business with the dealers, and the latter claim that this additional concession would work to the advantage of all. The manufacturers, however, consider that their regular discount to the dealers is amply large to cover such a contingency as the requirements of customers of the dealers. One important machine tool manufacturer gave up cash discounts, but later adopted a compromise system of sixty days net and one per cent in thirty days. This, he believes, is working most advantageously." All of which goes to show that the discount is a problem to those in other lines as well as in the lumber business, and that it is a good idea to keep it in mind in discussing improvements with other members of the trade.

G. D. C., Jr.



Connecticut Wood-Using Industries



The Connecticut Agricultural Experiment Station has published a bulletin dealing with the wood-using industries of that state. The statistics were collected and arranged by Albert H. Pierson of the United States Forest Service, in co-operation with the Connecticut Forest Department, under direction of S. N. Spring, state forester.

It is an exhaustive report and enters fully into the details of the manufacture of wood commodities in that state. The total quantity used last year was 110,000,000 feet, which is small compared with the amount of wood used by some other states; but utilization is highly specialized in Connecticut and the report is valuable for the details which it shows. Fifty-eight different woods are listed, white pine leading in quantity with one-fourth of the total amount. Chestnut follows, but it supplied less than one-third as much wood as white pine, while yellow poplar falls a little below chestnut. Thirty-two of the fifty-eight woods listed came wholly from outside of Connecticut, but the outside material was demanded in small lots, and of the whole supply used in the state, less than seventeen per cent was shipped in from outside regions.

That is an important showing for a state as old and as thickly settled as Connecticut. Compared, for instance, with Michigan it shows a much higher ratio of home-grown wood. Michigan imports thirty-eight per cent of the wood used by its factories. A considerable part of the forest in Connecticut is second growth, that is, it has come on since the original mature stands were cut. The average quantity of wood supplied yearly to factories by the forests in the state is nearly 20,000 feet per square mile.

The average cost of lumber bought by manufacturing plants was \$37.08 per 1,000 feet. That price is very high, in comparison with prices paid by similar manufacturers in most other states. It is higher than in Massachusetts, Maryland, Michigan or Illinois. The reason for the average high cost is that a rather large amount of very expensive foreign woods are used. Eight of them exceeded \$100 a thousand feet, and five of these averaged more than \$200. The most expensive was teak at \$287.50. The costliest American wood was black walnut at \$89.63, the cheapest hemlock at \$14.08. These prices are averages for the whole state. Some of the industries paid more, some less.

Twenty-six wood-using industries are listed in Connecticut. The largest quantity of material is used by box makers, the smallest by the manufacturers of butchers' blocks. The most important industries, in the order named, are: Boxes and crates, planing mill products; sash, doors, blinds and general millwork considered as one industry; musical instruments, ships and boats, clocks, vehicles, carpenters' tools, and woodenware. Some of the minor industries are the following: Laundry appliances, sporting and athletic goods, tanks, cigar boxes, printing materials, furniture, patterns, and firearms. The highest average prices for wood were paid as follows: The makers of carpenters' tools \$68.47, firearms \$67.11, patterns \$65.73, cigar boxes \$60.04. The lowest average prices were paid by boxes \$21.11, agricultural implements \$21.89, sporting and athletic goods \$22.68, and woodenware \$24.55.

The manufacture of boxes and crates is the leading industry in all the New England states for which statistics have been collected, that is, in Maine, New Hampshire, Massachusetts, and Connecticut. The reason for this is that extensive manufacturing is carried on in those states, and the product calls for shipping boxes. In all the states named the prevailing wood for boxes is white pine. Of the 24,411,000 feet of lumber used for boxes in Connecticut, nearly 17,000,000 feet were white pine—more than two-thirds of all. Three-fourths of it grew outside the state. The wood next in importance was spruce, followed by tupelo and black gum. The state supplied about one-fifth of the box material demanded by its manufacturers. About 3,500,000 feet came from south of the Potomac river. Twenty-one woods were listed for boxes, the hardwoods being sycamore, soft maple, red oak, hickory, hard maple, ash, rock or cork elm, white or soft elm, chestnut, basswood, yellow poplar or whitewood, black gum, and tupelo.

Many of the boxes in Connecticut are not the product of commercial box factories, but are made by manufacturers of various kinds of merchandise who make their own shipping boxes, but do not sell boxes to others. Hickory is an unusual wood for box making, and the quantity reported—25,000 feet—was probably used for dowels or other appliances for locking the corners of boxes or crates.

Planing mill products constitute the second largest wood-using industry in Connecticut. The principal commodities included are

interior and exterior finish for houses, including flooring and stair-work. Twenty-five woods are used, the leader being loblolly pine from the South, followed by cypress and shortleaf pine, also from the South. These three woods constitute nearly half of all demanded by this industry. White pine is fourth in quantity, followed by spruce. Fourteen of the species reported are hardwoods, of which yellow poplar is in most demand, followed in the order named by chestnut, white oak, red oak, ash, hard maple, red gum, sweet birch, cherry, tupelo, mahogany, black walnut, and beech. The walnut employed in this industry cost \$120 a thousand, the mahogany \$166. Less than five per cent of the wood was grown in the state.

Sash, doors and blinds constitute an important industry, and thirty-one woods are reported, white pine leading, followed by cypress, loblolly pine, and spruce. Eighteen of the thirty-one species are hardwoods, of which chestnut leads, followed by ash and yellow poplar. Thirteen thousand feet of hickory were used, chiefly as dowels. An equal quantity of black cherry was used.

Twenty of the twenty-five woods reported by manufacturers of musical instruments are hardwoods, constituting more than nine-tenths of all. Chestnut leads all others, and is followed by yellow poplar, basswood, and hard maple. The amounts of mahogany and cherry are comparatively large. Some very high-priced woods are listed by musical instrument makers in Connecticut, among them being black walnut \$198, mahogany \$243, ebony \$266, rosewood \$312, and Circassian walnut \$450. The average cost of all the woods reported in this industry is \$49.13.

Connecticut has long been famous for its clocks, and it is interesting to note the woods used and the amounts required. The following table gives these facts, and the average cost of each of the woods, per thousand feet:

Wood	Feet used 1912	Average cost
Red oak	1,481,000	\$ 30.22
Basswood	1,400,000	32.64
Yellow poplar	1,050,000	35.32
Chestnut	285,000	19.02
White oak	262,300	47.35
Mahogany	104,000	146.83
Soft maple	80,000	28.00
Sweet birch	33,000	49.70
Red gum	27,000	32.91
White pine	20,000	37.50
Paper birch	10,000	30.00
Black walnut	9,000	83.33
Rosewood	290	340.69
Total	4,761,590	\$ 35.81

A tradition of long standing fails to prove true in Connecticut. Many people suppose that applewood is an important material in clock manufacture, but not a foot is listed in Connecticut. It is probable that applewood was formerly used when the wheels of clocks were made of wood, but few are so made now.

The woods listed in a handle factory in Connecticut are quite different from those in a factory in Kentucky or Indiana. Hickory leads in Connecticut, but is not much ahead of several others. Twenty-two woods are used, some being costly. These are made into handles for knives and fine tools. Among these are cocobolo, a Central American wood costing \$167 per thousand, mahogany \$180, ebony \$232, and rosewood \$285. Other woods not usually listed in handle factories are applewood \$30, butternut \$25, white pine \$17.45, dogwood \$24, cherry \$20.17, and paper birch \$19.91.

Much similarity is found in the table giving woods employed in the manufacture of carpenters' tools. Boxwood at \$48 leads in quantity. This is the West Indian boxwood, and not the article from Turkey which is much more expensive. Next to the highest in quantity is cherry, third is beech and rosewood is fourth. The foreign woods are cocobolo, lignum-vitæ, and mahogany. The average cost of all is \$68.47 per thousand feet, which is higher than the average cost of wood in any other industry in Connecticut.

It is generally supposed that dogwood is one of the most important woods in shuttle making, but dogwood is not mentioned in this industry in Connecticut, though eight woods are listed, and more than a million feet a year are used. Persimmon, another good shuttle wood, is used to the amount of only 120,000 feet.

The manufacturers of firearms in Connecticut reported the fol-

lowing woods and prices for 1912:

	Feet used	Cost per 1000 feet
Black walnut	389,700	\$ 78.14
Red gum	210,000	44.50
Circassian walnut	2,000	250.00
Boxwood	1,731	115.54
Total	603,431	\$ 67.11

Makers of patterns used 512,905 feet in 1912, at an average cost of \$65.73 per thousand feet. The following woods are listed in the order of quantity, beginning with the highest: White pine, spruce, yellow poplar, mahogany, chestnut, Idaho white pine, cherry, and butternut.

The making of furniture in Connecticut is a smaller industry than the making of patterns. Less than half a million feet were used in 1912, and, strange as it may seem, lignum-vitæ was employed in a larger amount than any other of the seventeen woods, and in nearly as large an amount as all other woods together. The lignum-vitæ is imported from Costa Rico, costing \$92 per thousand, and is manufactured into casters. It is evident that caster makers in Connecticut supply that article to furniture manufacturers in other states.

It is worthy of note that the leading cigar box material in Connecticut is rock or cork elm. This is not usually listed with woods used for cigar boxes. The amount was 93,500 feet, costing \$52.41. The other woods employed in Connecticut by cigar box makers are yellow poplar \$46.85, Spanish cedar \$115.59 (a very high price for this wood), tupelo \$54, red gum \$45.88, and basswood \$55.50.

Lumber Transfers Buggies

There are all sorts, kinds and conditions of wagons, lorries and buggies used to transfer lumber in and about a yard, but the equipment employed by the Lamb-Fish Lumber Company in its big plant at Charleston, Miss., looks about as economical and logical as any rig in existence.

The yard of this company covers an area of about forty acres and is planked throughout, while the lumber is loaded from the cars on an elevated platform. This company tried out several kinds of wooden-wheeled vehicles, but found that the wheels would not stand up in the Mississippi climate, and finally evolved the rig pictured in the accompanying engraving.

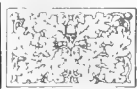


LUMBER TRANSFER BUGGY.

The wagon frame is mounted on cast iron wheels with five inch treads. The framework is bolted down to the square axles of the rear supporting sets of wheels, and is about seven feet long. The front wheels have a narrower tread than the rear ones, and are attached to the framework by a king bolt inserted through a broad circular pair of friction disks, one of which is fastened to the frame of the truck and the other to the wrought iron work of the front wheels.

A toggle binder chain is thrown around loads of narrow lumber for additional security, but ordinarily a load of from twelve to fifteen hundred feet is transferred without binders. The load is pulled by a mule.

This truck costs from seventeen to nineteen dollars and will stand up in any sort of weather conditions. It can be turned around in about as small a space as can a wheelbarrow. It is extremely handy and is giving the Lamb-Fish Lumber Company entire satisfaction as a vehicle for the transportation of lumber from the yard to cars.



Second Growth Defined



The term "second growth" when applied to wood is frequently used without a definite idea of its meaning, and it doesn't mean the same to all people who employ the term. The usual idea is that second growth timber has come on since the primeval forests were cut, or that it is timber which occupies old fields or tracts laid bare by fire or some other cause.

The chief consideration is that second growth timber must be comparatively young, and in many instances it is regarded as an advantage if it has grown on ground somewhat open. That, however, depends upon what kind of timber it is, and for what purpose it is intended.

A large part of the loblolly pine in the South is second growth, in the sense that it occupies old fields or other areas which were vacant at a comparatively recent period; but it is of no advantage to this pine to grow in open stands. If it does so, it is less valuable, because it is wanted in the form of long, shapely logs, free from limbs and knots. That kind is produced only in thick stands. Consequently, no one ever advertises loblolly pine, or any other pine, as second growth. Such an advertisement would not help to sell the lumber. In fact, the older a pine is, provided it has not been injured by decay, the better the lumber is.

Hickory is exactly the reverse. That is the wood most frequently advertised as second growth. When it stands in open ground, or where surrounding trees do not crowd it, the increase in size is rapid, and the trunk contains little heartwood, sometimes none, until the bole attains considerable size. Very tough wood is wanted. A short trunk with plenty of white sap, and with fibers tough and interlaced, is preferred to a long bole, which grows slowly in the shade of the forest and becomes brashy rather than tough. In that sense, to apply the term second growth to hickory really means something. No better hickory is procurable than that which grows in old fields, and in open spaces in the forest. The trunks are short, but the wood is excellent. A rather large amount of hickory of that kind goes to market, for it is a wood of rapid growth where it occupies open spaces and is nourished by good, deep soil. That is why some of the old states like Ohio and Indiana continue to send much good hickory to market, though the old forest supply was pretty closely cut years ago.

Second growth is an advantage to ash and elm, and in fact to

nearly all woods in which toughness and strength are highly desirable; but it holds in all cases that trees which develop in open ground and increase in size rapidly, have short trunks and large crowns. It is the large crown, with plenty of leaves, which can develop only in open ground, that causes the trunk to increase rapidly in size. The growth of wood is in direct proportion to the quantity and health of the foliage. A starved, compressed crown, in a thick forest, cannot feed the trunk sufficiently to induce rapid growth.

Elm and ash are found in open ground occasionally, but genuine second growth is less abundant with them than with hickory. They are sawed into lumber oftener than hickory, and toughness and abundance of sapwood are not so frequently insisted upon.

No one ever advertises second growth walnut, yet, in proportion to the total quantity of growing trees, it is doubtful if any wild tree of this country is more frequently found fulfilling typical second growth conditions than black walnut. It is an old-field and wayside tree, and springs up plentifully and grows rapidly. No one wants second growth walnut, because walnut is purchased for the color and size of its heartwood. Young trees, growing rapidly in the open, develop heartwood so slowly that a trunk eighteen inches through may not have more than six or eight inches of colored heart, often less than that. The old, forest-grown walnut possesses the desired properties, though it is neither tough nor very strong.

Oak is like both hickory and walnut, that is, some users want young, tough, second growth, others will take only mature trees, from which most of the elasticity and toughness of youth has departed. It depends upon the use intended. The wagon maker would rather have the young tree, and he cares nothing about the color and figure of the heartwood; in fact, the less of it, the better. The furniture maker has no use for young oak of second growth, but wants veteran trees, with old, rich heart, abundance of figure, and plenty of grain. Beauty rather than excessive strength is the chief consideration.

Taking the country generally, there will be more second growth timber in the future than there has been in the past, because the primeval forests are being cut, and growth more or less open, and timber of less age will largely meet demand in the years to come.



More Hardwoods in the Home



It was, of course, a man who said, "Inconsistency, thy name is woman!"

Here's an instance to prove the point.

A clothing dealer in one of the leading cities of the Ohio valley was carefully explaining why a reduction in the tariff on wool or woollen goods would not affect the cost of clothing appreciably.

"The material doesn't cost much compared with the price paid by the ultimate consumer," he pointed out. "It must be remembered that the goods in fabric form move through two or three hands before reaching the factory or tailor; then the cutting up and manufacturing process puts an additional impost of expense upon them; and the greatest load of all is added in distribution to the trade and sale over the counters of the retailer, because the latter has to maintain expensive quarters in the heart of the city, install the most expensive and convenient fixtures and deliver the goods ten miles by motor truck, if necessary, in order to get the trade. I venture to say that changing the value of woollen goods by means of a tariff reduction will not affect the price of a suit of clothing to the extent of thirty cents, on an average."

This was an impressive demonstration; but it would have been

more conclusive, as well as more consistent, if the same idea had been followed out by the clothier; for he was at that time letting a contract to a builder for the erection of a home which was to cost five or six thousand dollars, in which all of the interior finish above the first floor was to be of pine and other softwoods, while even downstairs hardwoods had a chance chiefly at the floors, most of the doors being of inferior material.

The reason oak was not being more generally used was because of the "expense," the clothier having inquired of his architect which would be the cheaper. When he learned that cypress cost less than poplar and pine less than oak, he ordered the designer to substitute the less expensive woods.

But he nevertheless believes that the cost of material is a minor factor and that manufacturing and labor expense forms the chief load—in the clothing business.

It is equally true of the lumber field, but consumers appear not to realize it. And this creates a splendid opportunity for the hardwood trade to do a little intelligent boosting. The average owner doesn't realize how much it would add to his home, in beauty, durability and value, to have oak and other hardwood trimmings and floors instead of softwoods chosen because of their

cheapness and little else. Of course some of the manufacturers of these woods have exploited their product intelligently enough to create something of a consumers' demand, which has been responsible for a positive statement by the owner in favor of a wood which is obviously inferior to oak. But, generally speaking, it is the apparent difference in cost which affects the situation most.

A well-known builder, who operates a planing-mill for the manufacture of the millwork and interior finish used in his own jobs, as well as for the trade, said the other day that in the typical dwelling costing from \$5,000 to \$7,500 the difference in cost between pine and oak would not amount to more than \$150, or roughly 2½ per cent; while the value of the house built with hardwoods for interior finish is always greater than the difference in cost indicated. Obviously, then, such a policy is not only a good one from the standpoint of investment values, but in the long run is a real economy.

This builder is himself an enthusiast on the subject of oak, for he said:

"I can't understand the apparent failure on the part of the public to demand oak and other high-class hardwoods for interior finish work. My hands are tied, largely, because the owners and architects say what they want and I must give it to them. But with pine costing \$35 and oak \$65 delivered, and the manufacturing expense not more than ten or fifteen per cent greater on oak than the other wood, the opportunity to show much of an increase in cost because of the use of the better wood is not very large.

"And think of the difference in the results! Nothing wears like oak, and in a house where there are children, who are kicking up the woodwork and putting it to the severest tests, oak seems rather to improve than otherwise; while any other wood rapidly depreciates and loses its appearance, carrying down the value of the house immediately and inevitably.

"A smart home-builder who is in the business of designing and selling moderate-priced homes in a large middlewestern city said recently that he had long ago realized that it is the woodwork that does more than anything else to sell his properties.

"I have found that it pays to spend a little more time and expense on framing up a pleasing interior, using hardwood floors and hardwood interiors generally wherever I can afford it, than to put the same money into other things. Oak finish means to a house what sterling does to silver, and I take advantage of it whenever I can."

This chap builds bungalows which are rather hastily thrown together, and relies more on their "cuteness" and conveniences of arrangement than actual quality to sell them; yet, even so, the builder realizes the immense advantage won by putting in a little money on his interior finish.

Did you ever notice the ads of those who have houses to sell? If they have any hardwoods in their buildings, they not only mention it but feature it! Hardwood floors have long been recognized as indicating a high-grade proposition, and the public needs only to be educated as to the corresponding desirability of other hardwood items.

Take doors for instance. Here pine is specified in a great many cases when the logic of the situation demands oak. And stairways, balustrades, molding, baseboards, window sash, door-frames and other classes of interior finish, even in houses that are desirable in many respects, are too often of baser woods, the owner apparently being overcome by the idea that the use of hardwood interior finish throughout would increase the cost immensely.

The hardwood flooring people have the battle half-won, but even they should press their advantage more closely. Instead of being content with hardwood floors appearing only in a few rooms on the lower floor, as is frequently the case, why not point out the immense advantage and the slight increased cost of putting them all over the house? The public is ripe for arguments of this sort, and if the initial advantage already held were followed up, it would unquestionably show in the increased consumption of hardwood flooring, even though this commodity, as indicated, is leading other forms of hardwoods by a long way in interior construction.

The architects offer probably the most fertile field for general work on the subject at present. That they haven't the courage of their convictions was indicated by remarks made by a young designer recently in discussing the fads and foibles of owners.

"In a great many cases," he said, "I specify oak and other hardwoods in interior work, but when the estimates come in from contractors it frequently happens that the owner finds that the castle he had built in his imagination is going to cost more in reality than he had intended. He wants to know if the cost can't be cut down somewhere; and that means I have to begin to pare. I attack the heating and plumbing installations, the lighting fixtures, the hardware and the interior finish, because all other items are practically fixed, unless the design of the house be substantially altered; so that by dint of cutting off a hundred here, fifty dollars there and a couple of hundred over there, through a considerable list of items, we manage to get the price down to what the man who pays the bills thinks it ought to be. So it's frequently a case of necessity on my part."

Stated that way, the situation does not seem encouraging; but inasmuch as the average owner wants a first-class house, especially if it is to be his home, he would be willing to stretch his appropriation a little in order to cover what seem to be essentials; but the point is that hardwood trimming has not been considered in that light, but merely as an optional feature, to be included if possible, and left out if convenient.

Consequently the problem that presents itself to the trade is to impress the facts upon the architect, the owner and the public at large that hardwoods are not expensive; that they do not increase the cost of home-building materially; that they do increase the value of a house by considerably more than the added cost; that the beauty and durability of the home so trimmed are greater, by far, than is the case in that which is finished with inferior materials. When these points are hammered in hard enough and long enough, there won't be any question about it; the public will not only be willing to take oak and other hardwoods if the architect suggests it, but will actually demand them.

G. D. C., Jr.

The Filer and the Sawyer

There are two men of primary importance in the operation of a sawmill, men on whom quite a share of the success of the operations depends. These two men are the saw filer and the sawyer. Usually the importance of the saw filer is duly recognized and he is the best paid man on the place, but the other man, the sawyer, who sometimes does not receive as much recognition or pay, is often more important in a way than the filer. The reason for this is that it is easy enough to recognize when a filer is doing his duty, whereas it is difficult at times to know whether or not the sawyer is doing his duty; consequently when you have a sawyer who you know is good and is doing all that he should do, he is really worth as much to the mill owner as is the filer.

If the filer fails in his duty the result is apparent almost immediately in the form of broken or poorly running saws. In other words, there is immediate and direct evidence of how the filer is doing his duty, so it is comparatively easy to keep check on him and either keep him keyed up to his work or get another man. With the sawyer it is a different matter. You can tell whether or not he is wasting timber in unnecessarily large slabs, but it is quite a complicated task, requiring the presence of an expert all the time, to tell whether or not the sawyer is getting all the money value that he should out of logs. There is really more brain work about properly sawing up logs, if one stays by the job faithfully, than there is about properly filing or tensioning a saw. The sawyer who uses his brains, uses them well and continuously; may save the millman many times more money, as compared to an indifferent sawyer, in the course of a day than the wages of the sawyer and filer combined. For this reason the sawyer is really entitled to more consideration than he usually gets, and if he is really a good man and uses his brains all the time, he is the man who should pull down the biggest wages in the sawmill. Some time this fact will be recognized.

J. C. T.

Three Unusual Trees

HAMMATTI

The hammatti tree is indigenous to the Pacific slope of the southern part of Central America, where it forms the most conspicuous forest tree. It is botanically called *Cavanillesia platani-folia*, and is one of the most majestic trees known. It has an exceedingly limited distribution as compared with a good many of its closely allied species. The ceiba (*Eriodendron anfractuosum*), for instance, which closely resembles the hammatti, is well known, being a native of all tropical countries, and is frequently planted for shade and ornament. The hammatti, on the contrary, is a little known tree outside of its immediate region of distribution, and is not regarded as a desirable tree for planting for shade. This is due to the fact that the trunk is usually without branches for more than half the total height of the tree and does not cast a dense shade around its base. It grows from sixty to eighty feet in height and has a trunk often six feet in diameter four feet from the ground. Like some of its near relatives, the trunk of the hammatti tree frequently bulges out immediately above the ground, which renders it a very conspicuous object. Above this great bulge the trunk tapers very little until it reaches the first branches. The wood is white, coarse-grained, very soft, weak, and exceedingly light in weight. It is so light that one man can easily carry on his back a log eight feet long and three feet in diameter. This huge tree possesses no value as timber, because it decays in a short time after it is cut. The wood is also of very little importance as fuel.

BRAZIL-NUT TREE

Brazil-nut tree, or *Bertholletia excelsa*, is one of the most widely distributed trees in Brazil, Guianas and Venezuela, and furnishes the well-known Brazil nuts or cream nuts of commerce. The tree attains a height of from one hundred to one hundred and fifty feet and a diameter of from three to five feet. It is one of the most gigantic trees in the South American forests and forms immense stretches of forests along the banks of the Amazon and Rio Negro, and likewise about Esmeraldas on the Orinoco, where the natives call it "juvia." The Portuguese name in Brazil is castanheiro or castanheiro do Para, and is so called because the Castanheiro Indians usually gather the nuts and bring them to the market in Para, where they form a considerable article of export.

In 1910 nearly 500,000 bushels of these nuts, valued at \$1,250,000, were imported into the United States.

The fruit of this tree is nearly round and contains from eighteen to twenty-four seeds, which are so beautifully packed in the shell that when once removed it is impossible to replace them. When the fruits are ripe they fall to the ground and the Indians, who gather them, split them open with an ax and gather the seed for shipment. These seeds are much used in commerce. The oil expressed from the nuts forms a substitute for olive oil, and is employed by watchmakers and artists.

The Brazil-nut tree is closely related to the Colombian mahogany (*Cariniana pyriformis*) and the woods resemble each other in general appearance. The wood of this tree is coarser, however, and is not likely to be substituted for either the true or Colombian mahogany. It is highly esteemed in Brazil for building and naval construction and for works exposed to the soil and air. It is hard, heavy, strong and tough, and splits with a straight, clean fracture, though not so easily as our hard maple. The wood is light brown, but turns slightly darker with age, and takes a very fair polish, which it retains. It is found in such great abundance and possesses so many of the qualities necessary to make posts, poles, piles and exposed timbers of all kinds that it may be expected to be found in the American markets in the near future. Its durability combined with cheapness recommends it as a substitute for our flooring woods, and it will make an absolutely clean floor that will last. Our beech, birch and maple make fine floors, but the cost is generally so high that these seem prohibitive except in high-class work. There is an almost inexhaustible supply of this wood and the large forests have scarcely been touched with the ax.

Every part of the tree is useful. The bark is employed for making oakum, which is used extensively in Brazil for calking vessels.

ARAUCARIAN PINE

The araucarian or Chilean pine (*Araucaria imbricata*) is a magnificent evergreen tree of the cone-bearing family of plants, and is reputed to be hardy in this country as far north as the latitude of New York. It will stand the climate without any difficulty anywhere south of the Mason and Dixon line, where it will thrive



HAMMATTI, THE MOST REMARKABLE TREE IN PANAMA.



BRAZIL-NUT TREES SHOWING THEIR LONG CLEAR TRUNKS.



AN ARAUCARIAN PINE PLANTED FOR ORNAMENT.

and grow for centuries, as it is known to do in its native country. It is unquestionably the most interesting tree of this great group of evergreen trees. The general characters of its shoots, even when the tree is young, are singularly bold and picturesque, and quite different from that of every other tree of this tribe. The leaves are usually eight together, ovate, lance-shaped, thickened at the base, stiff, straight, with persistent sharp points at the tips. The cones are globular at the ends of the branches and about the size of a man's head. The scales are beautifully imbricated.

In its native country this tree attains a height of from eighty to one hundred feet, with a trunk like a pillar. The crown is shaped

like a depressed cone, the side branches proceeding from the trunk in a horizontal direction, and ascending slightly at the tips. Over those branches, which are arranged in whorls, the leaves are thickly set, like scales, which give an appearance of richly-embossed work. From the thick coating of leaves, which pervades the whole outline of the tree, an idea of brittleness is conveyed to the mind. The wood, however, was successfully used in shipbuilding in 1780, for which it is peculiarly suited. The tree is also particularly ornamental, and no plant can be used with greater effect in distinguishing particular spots of country appropriated to art. It should be on every lawn. It is both elegant and unique. L. L. D.



More Efficient Wood Utilization



Editor's Note

The following is a report of the speech delivered by O. T. Swan of the United States Forest Service, before the annual meeting of the North Carolina Pine Association, Norfolk, Va., March 20.

Rising stumpage values, increasing costs of production, and a market at times liable to oversupply and always subject to competition from other materials, have turned the attention of lumber manufacturers during the recent years to the possibilities of securing increased profits from stumpage through better utilization. It is in fact the competition of wood substitutes which is forcing the attention of lumbermen to this question since through closer utilization on a large scale it is hoped to secure a more profitable and a more stable industry notwithstanding other limits of the lumber market. The vulnerable points of the lumber industry and the possible extent of substitution may be more clearly seen by noting the quantity of lumber used for different purposes and determining in which uses wood has a natural monopoly. Estimates made by the Office of Wood Utilization subsequent to statistical studies of the amount of wood consumed by all the wood-using factories in twenty states indicate that about thirty per cent of the entire lumber cut goes into planing mill products, where competing materials are weakest. About twenty-six per cent goes into rough lumber and structural timbers, where it meets steel, brick, and concrete. About ten per cent goes into boxes and crating where fiber and veneer are having their peculiar effects on the industry. About five per cent goes into car construction and is to no small extent being driven out by steel. Over three per cent goes into furniture and two per cent into vehicles where the peculiar and valuable qualities of wood offer strong resistance to any encroachment of other materials. Two per cent of the cut is used for sawed ties and there is now no substitute for the wooden tie. Over five per cent is exported. This quantity will probably increase greatly since the United States is one of the few great timber-producing countries. The remainder of the lumber produced, or about fifteen per cent, goes into a great many miscellaneous uses.* In all of these leading avenues of wood consumption which I have mentioned, with the exception of that of crossties and export stock, wood is subject to the competition of other materials, and advancing cost of wood for these purposes will tend strongly to bring about the increased use of the competing products.

In those articles for which wood possesses valuable qualities, which present substitutes lack, or in those articles in which the cost of the wood used is a relatively small per cent of the cost of the finished product, wood can meet competition. But in those classes of products in which the cost of the wood used is a high per cent of the cost of the finished article, and for which more or less suitable substitutes are available, wood is liable to gradual commercial displacement as its cost to the consumer increases or as the cost of substitutes decreases. Further, there is a distinct

trend toward a cheaper production of substitutes and toward more permanent construction.

From this it appears that it may be difficult to continue indefinitely to market annually the present average total product of the lumber mills if economic conditions force a continual rise in price of lumber for some of these major uses. Certain species and certain grades of lumber can compete with substitutes, even at considerably higher values than at present. It is the output of the mills as a whole—the disposition of large quantities of certain woods—which presents a difficult situation. Decreased output will not balance this possible condition since the higher grades will probably be required in present or greater quantities. On the other hand, the natural increase of the country in population, the development of new uses for wood and the growth of the world demand for timber reflected in the export trade are counterbalancing factors of great weight. Nevertheless, the outlook demands that waste products of this industry be made to produce revenue and that present conversion methods be improved.

Wood, in its course from the tree to the finished article, is subject to greater losses than any other important raw material, since much less than one-half of the tree reaches the final user of the wood. The bulk of this loss of raw material has been necessary to the processes of conversion, to the cost limits in handling or transportation, to the practical requirements of commercial grading, or to the lack of definitely proven profitable systems of close utilization having general applicability. No one of these limiting factors is fixed and it is worth while to have in mind what utilization changes can follow changes in these limits. Conversion processes have steadily improved, new machines reduce handling costs, transportation charges are not unchanging, commercial grades often fail to meet specifications for new uses properly, while there is a constant advance in the knowledge of processes by which further products can be made from wood in its waste forms.

QUANTITIES AND FORMS OF WASTE

In order to find out just how much waste material is available the Office of Wood Utilization secured reports from a large number of the most prominent sawmills in the state of Wisconsin, showing the quantities and forms of waste in that state. Reports from 136 mills, cutting 860,000,000 feet, show that they have available annually 576,000 cords of sawmill waste, and 1,373,000 cords of wood waste, making a total of 1,949,000 cords. Thirty-five per cent of the total is sawmill waste, the remainder being woods waste. This material will cost, on an average, \$2.12 per cord f. o. b. car at the mill, with an additional cost of 30 cents per cord for sorting the species for separate shipment. The woods waste may be purchased at an average price of \$3 f. o. b. car at the mill. About one-third of the mill waste is now sold or used as fuel. Conditions, as reported in Wisconsin, are duplicated in the other lumber producing states to a greater or less extent.

*When the final figures for all states are available it is believed that the modification, if any, of these estimates will be in the direction of a larger per cent of lumber in construction.

While the percentage of waste varies greatly in different parts of the country and in different operations, it appears that in producing forty billion feet of lumber in the United States the following quantities of material, expressed in terms of cubic feet of the original tree, have not reached best use at the mills:

900 million	cubic feet of wood in sawdust
550 "	" " " " " " slabs
550 "	" " " " " " edgings and trimmings
230 "	" " " " " " careless manufacture and accidents
133 "	" " " " " " standard lengths and widths
1,000 "	" " " " " " bark

Taking the loss in stumps, tops, broken and defective trees, and trees left for other reasons, in the ratio to production as reported in Wisconsin, 5,700 million cubic feet of such material is left in the woods annually. The total quantity of all material amounts by these estimates to approximately 9 billion cubic feet, or the equivalent of 100 million cords. Of this about one-third is sawmill waste.

The species furnishing the greatest quantities of material and the most material at a single point are, of course, yellow pine in the South, Douglas fir and redwood in the West, and white pine and hemlock in the North. Yellow pine furnishes over a third of these totals.

CONVERSION OF THE LOG AND WASTE MATERIAL IN FURTHER MANUFACTURE

This phase of the subject in fact must include present efficiency in the manufacture of lumber, the present disposition of the lower grades, and the unusual use of waste material.

Waste wood can now be used to a limited extent either by further manufacture, resulting in the production of certain classes of short lumber and small wooden articles, or as the raw material in industries in which it loses its identity as wood through mechanical distintegration or chemical processes. In the latter case such articles as wood pulp, alcohol, etc., are produced. Small mills, for reasons which will be shown later, are chiefly limited to the first method in the utilization of their waste, while the problems of the large operations apparently must be met by both, but largely by the chemical industries.

While much has been accomplished, there are many reasons operating to prevent the general use of wood waste in manufacture of wooden articles or products other than lumber. First, there may not be enough waste annually at a given point to warrant the installation of the special machinery required; second, the waste may be of innumerable sizes, shapes and species, and the cost of sorting thereby made prohibitive; third, location of supply and markets may be such that freight charges would absorb the profits; fourth, the fuel value of the material may be greater than the profits from further manufacture; fifth, the market for the product may be very limited; sixth, the necessary machinery may be ill adapted to handling the form of waste or not open to general use on account of patents. It is, therefore, a distinct problem in each locality and for each mill.

On the other hand, if the amount of waste is relatively large, the sizes and shapes few in number, the market for the product not too distant or overstocked, it often happens that wood waste can be profitably made into other articles. The opportunities for unusual applications of this method are greatest in connection with the more valuable hardwoods, and least often, feasible in the case of cheap coniferous woods. There are a number of localities where the waste of hardwood mills can be converted into squares and other small dimension stock for the use of nearby furniture factories, novelty mills and other wood industries. The present difficulties lie in the disposal of assorted lengths instead of a few sizes, the assembling of sufficient quantities of this material subject to regular shipment to several industries, incompetent manufacture of the stock, and loss in handling due to checking, stain, etc. Some central agency in such localities would often solve the difficulties mentioned above. As practical millmen, you know now about how far it is profitable to manufacture lath, box lumber, moldings, pickets, etc., from material which might not otherwise be used.

Short hardwood parquetry flooring stock is common in Europe, while here it is common to see hardwood flooring cut into 12-inch lengths by carpenters laying flooring in patterns in apartment houses. In France short pine pieces are used for pine parquetry flooring, which is often laid direct on the joists in the herring bone pattern, the joints being thus supported by the joists. This utilizes short flooring less than two feet long of uniform size. No market exists at present for this stock in this country, but it offers a suggestion. This example is representative of many similar ones and illustrates the opportunity and the difficulties.

The manufacture of paving blocks is one of the growing uses of wood in this country which deserves your attention. The equivalent of 10,000,000 cubic feet of lumber was used for paving in 1911. Strong coniferous woods which take a heavy creosote oil treatment readily will probably prove most acceptable for this use. In Europe the heavy, dense hardwoods, up to this time, have not given results equal to treated conifers. The complete list of American woods which will give satisfactory service as paving has not been determined and test pavements should be laid to test them. The installation of a wood preserving plant permits the treatment of paving blocks, crossties sawn from the poorest part of the log, poles and piling. Such a plant permits greater flexibility in the utilization of the timber in the woods and the products of the mill since the durability of timber can be brought up to commercial requirements of wood preserving processes. The growth of these processes and the amounts of material treated in the United States in the past ten years has been remarkable.

In favorable situations it is desirable that other industries be conducted in conjunction with lumbering for closer utilization. For instance, there are cases where cooperage manufacture, pole and tie production and lumbering are conducted on the same operation profitably. Trees and other material which would be left in the woods by the lumberman can be utilized by the cooperage manufacturer. The manufacture of such stock, however, from mill waste or slabs will not likely prove profitable, except in the case of heading under certain conditions.

The box industry, which aids greatly in utilizing the tree, is injured by that competition within and outside the industry which forces down the quality of the package by a lack of standards. The loss to shippers and railroads through improper packing is enormous. In my judgment, one of the best steps which could be taken would be to work out standard strength and other requirements for all the leading classes of shipping containers, through co-operation between the manufacturers of all such containers, the shippers and the railroads. Such tests should be reduced to a scientific basis. The standards could be made obligatory or shipment refused. The best form in which material can be used in order to manufacture the strongest container for a given purpose at a cost limit needs to be determined.

The veneer industry is growing very fast and making good use of the material handled, largely gum. In some cases even the cores are being sold to paper mills for manufacture into pulp, used as mine rollers or cut into crating for vegetables. More gum mine rollers are used in Pennsylvania than any other wood. Formerly maple was preferred. The growing tendency to market fruit and vegetables in fancy packages is increasing the market for cheap veneer, while the use of built-up lumber is increasing rapidly.

The lumber associations can assist utilization in important ways. In transportation, differential rates for low-grade lumber and low rates for mill waste would help considerably. It is their work to increase the use of odd lengths and short lengths and to see that specifications of important consuming industries are adapted to the material which can best be furnished. The Forest Service is doing considerable work along this line.

The article then reviewed the possibilities of close utilization through turpentine extraction from waste and through the manufacture of wood pulp.

In the destructive distillation process the wood is heated in a retort until it is broken down chemically, vaporizing a number of compounds which are later recovered. Turpentine, charcoal and tar

are the principal products obtained from coniferous woods, while wood alcohol, acetates and charcoal are derived from the hardwoods. About one hundred plants are now operating in New York, Pennsylvania and the Lake States, on birch, beech and maple, which are received usually in the form of cordwood. About thirty plants are operating on softwoods in the southern states, mainly in Florida, Alabama and Georgia, on material which is largely woods waste, although some mill waste is included.

The production of ethyl alcohol from sawdust has claimed considerable attention during recent years. Probably many kinds of wood can be used by this process, the limitations as to species, however, not being well known at present. The forms of waste which can be employed are unlimited since the material must be very finely divided before treatment. The sawdust is treated with sulphuric acid under suitable conditions, resulting in the formation of sugar, which is then fermented to produce alcohol. Several commercial plants, some in this country, have been erected to produce alcohol from wood in this manner. There are certain difficulties related to the maintenance of the equipment under the strong acid used and securing efficient chemical conversions which require further investigation. The firm establishment and growth of this industry is a development much to be desired since it will assist in solving two problems: the utilization of sawdust and the production of another fuel for motors, one of the growing problems of the motor car industry, following increasing cost of the present fuel. Cheap ethyl alcohol is assured of a satisfactory market, while sawdust exists in greater quantities than any other form of mill waste.

The development of power by the use of wood waste in special gas producer plants operating gas engines is capable of almost unlimited development, since, as the process becomes efficient, the power produced can readily be transmitted considerable distances by electrical engineering methods. Plants are in operation in France and one or two in this country.

Bark in large quantities is used only in the production of tannin extracts, only hemlock, chestnut oak and tanbark oak containing sufficient tannin to warrant extraction under present methods. Possibly the production of fiber board will utilize the bark of other trees eventually.

The leaves of trees have seldom been utilized. In Australia and even in California the leaves and twigs of some of the eucalypts are distilled by very simple and inexpensive apparatus, with the recovery of some very valuable and marketable oils. The essential oils in the leaves of American trees have been very little investigated, yet there is little doubt that some of these products would prove of value. The leaves of longleaf pine have been exploited for a number of specific purposes at different times, such as the production of paper pulps and textile fiber substitutes, but without lasting results, I believe.

Chemical methods of waste utilization, which generally involve an expensive plant, experts in the industry, a continuous and large supply of material, are not of a character which can be adopted by small mills acting as separate units. Acting in groups the transportation of material presents increasing difficulties. These methods are most applicable to large plants, operating on certain woods, with available timber for fifteen years or more. Considerable capital is required and the employment of experts is, of course, essential. This development, therefore, will probably be slow and perhaps more likely to come about through the activities of the experts in these other industries in their search for raw material than otherwise.

The ideal utilization plant would consist of a number of industries assembled under one organization, and in sufficient variety so that the timber in question could be converted into precisely those products for which each part of it is best suited and which would bring the best return, under the market conditions prevailing at any time.

It is conceivable that a plant of this kind in a favored situation in the longleaf pine belt may eventually turpentine the standing timber, recover turpentine from parts of the mill waste and the

light-wood of the forests use part of this and other waste in the production of paper, manufacture lumber from the best parts of the tree, and convert the remaining parts into varied manufactured products according to the market. A wood-preserving plant as a part of this equipment should lead to the profitable marketing of ties, poles, piling, and paving blocks.

Summarizing, it is clearly apparent that the lumber industry needs profitable methods of waste utilization, and there are a number of methods which have actually been applied to a limited extent, some of which are being employed to a greater extent each year; that a number of methods while offering much of promise hold many problems requiring solution before they can be considered as meeting present conditions. Private capital is doing much along several lines in the actual testing out of methods.

The branch of products of the Forest Service is conducting investigations to find methods to prevent waste, to utilize waste, and to increase the service of timber. This work, which includes many studies of interest to lumbermen, is conducted by the Forest Products Laboratory at Madison, Wis., and along different lines but in a less comprehensive way by the Office of Wood Utilization in Washington. The Office of Wood Utilization is now completing a statistical investigation of the wood-using industries of the United States. The results of this work should be of considerable interest to the lumber trade, since there will be available (1) the first authentic statement of the amount of each kind of lumber used by each industry, and (2) the principal uses made of each species in all parts of the country. It will thus become possible to trace lumber into its various channels of use and to measure the competition of different kinds of wood for certain purposes in each state. It is planned to make this information available for use in two series of publications; one concerning each of the important woods, which will show clearly where it grows, where it is milled, where and by what industries it is consumed and its exact use in all parts of the country. The other series of publications will give similar information from the standpoint of each of the different industries, discussing the woods which are of particular value to each of them. Reports of this character are now available for nearly every important wood-consuming state.

Information concerning the classes of raw material required by the wood-working industries is being assembled in order that suggestions looking to the use by one industry of the waste of another may be brought out. Data showing the classes, quantities, and forms of waste in each of the different industries is being compiled. One of the greatest obstacles to the use of waste material in the industries through further manufacture lies in the absence of machines which will economically handle wood in the peculiar form in which it occurs as waste material. Few machines, no matter how small the articles manufactured, have been designed with the idea of using waste wood. It is the intention to assemble data showing what opportunities exist for machines of this character and after a close study of the present available machinery to place the information before machine manufacturers in order that they may design new equipment to meet this new point of view.

Inquiries are being received in increasing numbers from manufacturers who wish to use or dispose of various kinds of raw material. This shows plainly that much more attention is being given to this matter in recent years than ever before. Tests are being arranged in co-operation with the manufacturers of wooden articles in order that the value of certain untried woods may be proved out under new uses commercially, thus establishing a better market for the wood and opening up new sources of raw material for manufacture. The Office of Wood Utilization is also engaged in an endeavor to assist in a more complete use of the large quantities of chestnut timber which are being killed by the bark disease. This disease is steadily advancing into the unaffected chestnut region and it is by no means certain that it will not eventually cover the entire chestnut belt. Since the trees remain merchantable only a few years after their death from this disease, the problem of securing the prompt marketing of the material is pressing in the states north of Virginia, and a great deal of

detailed information concerning the channels of use into which the wood may be directed is being disseminated. Actual tests are also being made to show the lack of foundation for certain prejudices which exist against the blight-killed timber in some sections. Similar studies have been made where large areas of timber have been killed by fires in the West.

Large quantities of low-grade lumber are used in the form of both outside and inside scaffolding in the construction of buildings or interior decoration. Recently several forms of patented scaffolding have been placed on the market, some of which offer so many advantages, including greatly reduced cost over present forms of lumber scaffolding, that their growing use is certain. These patented forms are used repeatedly. The Forest Service has under way an investigation from which it is planned to estimate the amount of lumber used in scaffolding and to study the different patented substitutes. Lumbermen themselves can offer one substitute which can be used more cheaply than the present forms. I refer to the poles scaffolding used almost exclusively in European countries. Instead of dimension timbers fastened by nails for this temporary work, long, light poles are readily put up and fastened by various simple devices other than nails or spikes. This pole framework carries the same plank floors used with the present dimension timber scaffolding. The material is used repeatedly and if generally introduced would furnish a brisk market for long, light poles with a butt diameter not exceeding from four to seven

inches. European building contractors carry a large stock of these poles.

The Forest Products Laboratory has a large corps of experts and is working upon the very problems which the preceding discussion has shown to be vital to a rapidly increasing utilization of waste by chemical industries. New woods are being tried out under the different processes such as in the production of paper pulp for wood distillation, alcohol, etc. Timber strength tests to show the comparative value of every commercial wood in the United States are being made.

An expensive equipment was installed last summer to investigate fully the production of alcohol from sawdust by the most improved processes. An improved type of dry kiln has been invented and tried out with most satisfactory results, and exact data on the relative durability of different woods and the value of different preserving chemicals is being determined by actual tests of the material in railway track, pole lines, wharves, etc.

A French process for the cheap preservation of poles has been successfully introduced into the national forests and will be tried out in the South. It is believed that loblolly pine poles can be made decay resistant ten or twelve years at small expense by this process.

The Forest Service hopes that lumbermen will follow these investigations closely, aid with their advice, and take full advantage of the results.

Forest Products of Canada

The Department of the Interior of Canada, through its forestry branch, has published bulletins 34 and 35, the former giving statistics of the output of lumber, lath, and shingles, for 1911, and the latter the production of crossties and poles for the same period. The reports were compiled by R. H. Campbell, director of forestry.

The figures for lumber are taken from the reports of 2,871 firms operating sawmills in Canada. That was an increase of 108 firms over 1910, the increase occurring in every province except Alberta and Quebec. It was greatest in Nova Scotia. The total value of lumber, lath and shingles produced in 1911 was \$82,321,664, the items being, lumber \$75,830,954, square timber \$766,406, shingles \$3,512,078, and lath \$2,212,226.

The lumber cut was largest in Ontario, second in British Columbia, and decreased in the other provinces in the order named: Quebec, New Brunswick, Nova Scotia, Saskatchewan, Manitoba, Alberta, Prince Edward Island. The total in Canada was 4,918,202,000 feet, which was an increase of 466,550,000 feet over 1910. The average mill in 1911 cut 1,713,000 feet, against 1,611,000 feet for 1910. The mill price of lumber, averaged for all kinds and in all provinces, was thirty-nine cents per thousand less than in 1910. The following table gives the average value at the mill of the twenty-six kinds of wood lumbered in Canada. They are named in the order of their rank in production beginning with the highest:

Spruce	\$13.65
White pine	20.01
Douglas fir	13.94
Hemlock	12.65
Cedar	14.86
Red or Norway pine.....	17.68
Birch (chiefly yellow birch)	17.04
Tamarack	13.95
Western yellow pine.....	15.22
Balsam fir	12.16
Maple	19.33
Basswood	19.69
Jack pine	13.80
Elm	19.26
Ash	18.74
Cottonwood and Aspen	15.24
Beech	14.47
Oak	28.57

Chestnut	22.73
Hickory	29.48
Walnut	20.45
Butternut	21.22
Cherry	28.63
Yellow poplar	19.43
Sycamore	20.26
Sassafras	12.00

There was a decrease from 1910 to 1911 of almost fifty per cent in the cut of beech, basswood, and balsam fir. Eight other woods showed a decrease, while hickory, walnut, and cherry increased. There was considerable decline in the average price of white pine and Douglas fir, but an increase in quantity for both of these. White pine decreased in mill price 40 cents and Douglas fir, \$1.51. A somewhat remarkable falling off in mill prices occurred with three common hardwoods, hickory, walnut and yellow poplar. The first was \$10.31 cheaper in 1911 than in 1910; the second, \$18.81 cheaper; the third, \$10.57 cheaper.

The annual cut of spruce in Canada is less than 200,000,000 feet below the cut in the United States, and Canada's output of balsam fir is 74,580,000 feet greater than that of the United States.

The cut of softwoods exceeds the hardwood output fifteen fold. In the United States the hardwood output is one-fifth that of softwood. The hardwood which is cut in largest quantity in Canada is birch, principally yellow birch, followed in the order named by maple, basswood, elm, ash, aspen and cottonwood, yellow poplar, beech, oak and chestnut. The output of oak lumber in Canada is less than 8,000,000 feet. This is not two per cent of the cut of oak in Tennessee or in West Virginia. Any one of twenty-seven states in this country exceeds the cut of oak in the whole of Canada. The annual production of ash in the United States is seven times that of Canada. Hickory and black walnut are almost extinct in that country. A little yellow poplar is sawed on the north shore of Lake Erie, and some cherry is found in Ontario and Quebec, but the whole Canadian output of cherry is only one-eighteenth that of the United States. All the sassafras reported was cut by a single mill north of Lake Erie.

During the year 1911, Canada exported the equivalent of about 14,000,000 feet, board measure, of square timber, chiefly birch, white pine, and elm. The trade in square logs has been declining

in Canada for thirty-five years on account of the increasing scarcity of clear timber of large enough dimensions for squaring. White pine of this kind has been decreasing since 1868, but has always headed the list of Canadian export square timber until 1911 when birch went above it in quantity but not in value. Oak is third on the list and elm fourth. About two per cent of the square timber exported from Canada entered the United States.

The output of shingles decreased more than 100,000,000 from 1910 to 1911. The cut in the latter year was 1,838,474,000. The principal falling off occurred in British Columbia and Quebec. The most expensive shingles were made in Saskatchewan, \$2.85 per thousand, and the cheapest in Prince Edward Island, \$1.25. The cut of shingles in the United States for 1910 was six and a half times greater than Canada's. Ninety-five per cent of Canadian shingles are of cedar, chiefly the western red cedar and the northern white cedar or arbor-vitæ.

The output of lath was 965,235,000 for the year, at an average mill value of \$2.29 per thousand. Spruce lath constituted the largest quantity, followed by white pine, cedar, Douglas fir, hem-

lock, and a dozen other woods. The United States produces about four times as many lath annually as Canada. Beech makes the most expensive lath in Canada at \$7.50; the cheapest is Douglas fir at \$1.83.

In 1911 Canada produced 13,683,770 crossties. The greatest number were of jack pine, followed in quantity by tamarack, Douglas fir, hemlock, spruce, cedar, oak, and a dozen others. Ten million ties were used in improving old tracks, and most of the others went into western lines. A rather large number listed as jack pine were lodgepole pine cut in the region of the Rocky Mountains.

It is estimated in Canada that eighty-seven per cent of crossties are destroyed by decay, twelve and one-half per cent by mechanical wear, and one-half per cent by insects. About 10,000,000 ties are annually destroyed.

The number of poles purchased was 585,703. That was nearly 200,000 less than were purchased in 1910. Their principal uses were in electric power lines, for steam and electric roads, and for telegraph and telephone lines. Ninety per cent of the poles were cedar. The second wood in quantity was western larch.



Big Holdings of a Scarce Wood



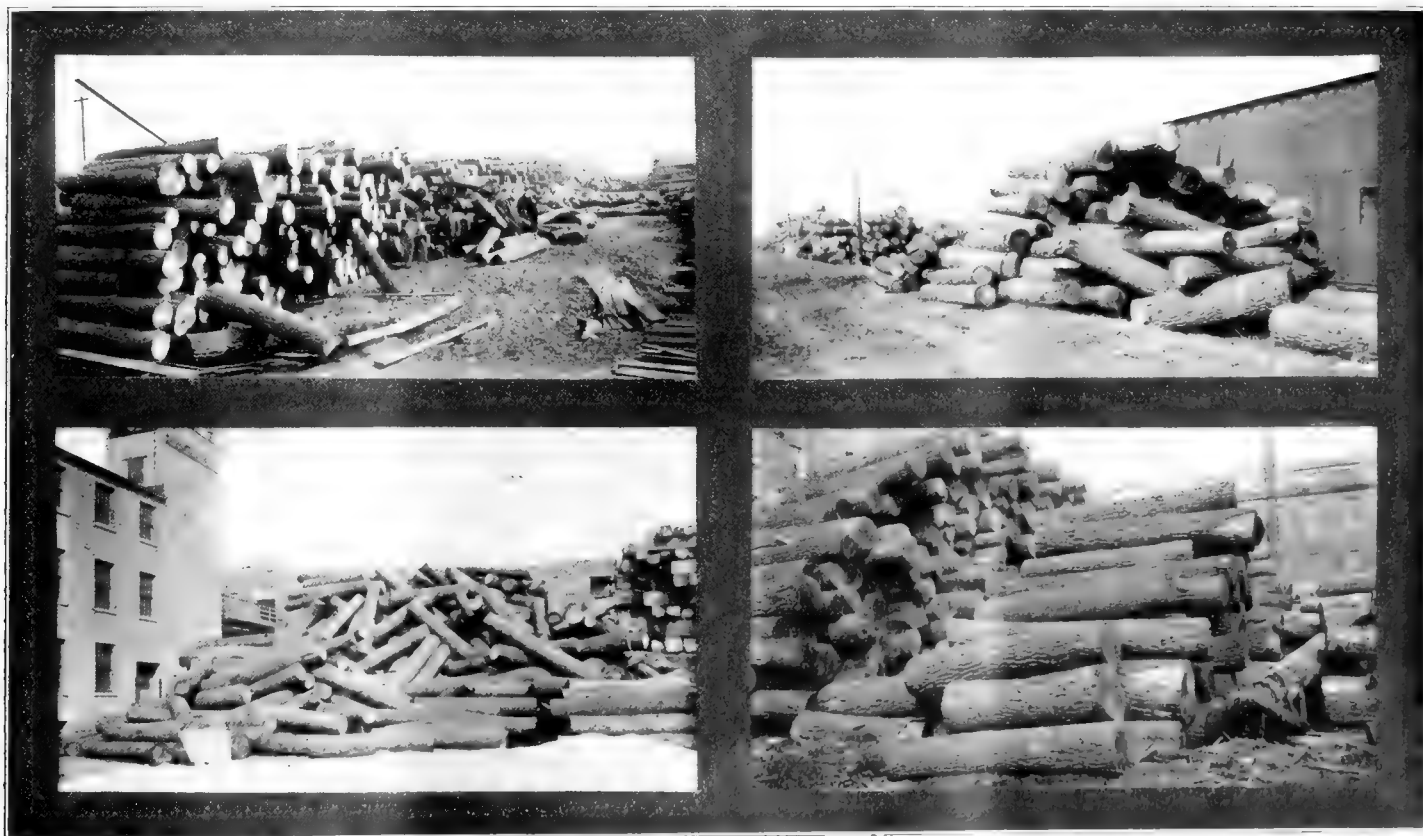
Nearly a year ago when C. L. Willey, the leading veneer and fancy wood man of Chicago, made a single contract for the delivery of two carloads of black walnut veneers weekly for a long period, wiseacres in the trade shook their heads. It was felt that Mr. Willey had assumed a pretty large contract, in view of the fact that black walnut was one of the scarcest woods in the United States.

The present total output of black walnut in this country is less than forty million feet annually, of which about one-half is exported in log form, largely to Germany.

Mr. Willey has not only made his deliveries during the last eight

months of two cars of veneers weekly on this order, but has taken care of a considerable quantity of miscellaneous black walnut veneer trade as well. At the present time he has in his log yards at Robey street and Blue Island avenue approximately 1,250,000 feet of as good black walnut logs as has been seen in years. These logs are piled on four rollways, and are pictured on this page. The rollway shown in the upper left hand picture is about eight hundred feet in length, and the illustration in the upper right hand shows another aggregation of logs nearly as long. The other two pictures show smaller dumps.

Besides this quantity of black walnut, Mr. Willey owns upwards



FOUR ROLLWAYS CONTAINING ONE AND A QUARTER MILLION FEET OF BLACK WALNUT LOGS AT PLANT OF C. L. WILLEY, CHICAGO

of four hundred additional carloads, which are in process of shipment to the Chicago plant. These logs have been picked up by his buyers in small quantities in Illinois, Arkansas, Missouri, Iowa, Oklahoma and Kansas. This is probably the largest assemblage of black walnut logs that has been seen for the past ten years,

and doubtless will never be duplicated in the history of black walnut veneer and lumber production. On the present basis of production, Mr. Willey is manufacturing into veneer and lumber ten per cent of the annual output of American walnut logs, exclusive of those which are shipped abroad for foreign consumption.



The Flood Situation



The effect of the unprecedented flood throughout the Middle West will be felt particularly by the lumber business. Its effect has already been seen in some sections in the matter of stock flooded and washed away and of tying up transportation so that delivery has been very nearly impossible. It is impractical to attempt to give a graphic description of flood conditions without being actually on the ground. Hence *HARDWOOD RECORD* has arranged to secure reports from various important sections showing what has already been done to the lumber business by the floods, and also telling the possible future effects which will be felt. These reports are shown in connection with this article.

At Cairo, the Ohio river rose to its highest stage and strenuous efforts were made to prevent any breaking or overflow of the levees. Every able-bodied man within reach was drafted into service by the troopers in charge, and they worked like demons piling up sandbags and dumping rock ballast in order to build the levees as high and substantially as possible. At the time of this writing it is believed that the danger mark has been passed, and that nothing need be anticipated, although the high water mark passed any previous records and the resulting pressure on the levees was terrific. Still as a result of the efforts to strengthen them they were equal to the task.

A large amount of lumber was shipped out of Cairo and Mound City immediately before the floods, and for this reason and because of the adequacy of the levees to perform their duty in most cases, the loss to the lumber trade was nowhere near what had been anticipated.

At Louisville, Ky., as at other points, the highest water since 1884 was experienced. The usual ill effects were felt by the lumber trade, which was completely tied up, both because of suspension of transportation, and because of stock being submerged. At this writing, the railroad companies are resuming normal operations.

At Evansville, Ind., the lumber trade experienced considerable loss due directly to the floods. The height reached was the greatest ever recorded at Evansville, and because of the fact that most of the mills are on high land or well away from the river, the principal damage was done to woodworking factories and yards rather than to the mills. However, considerable quantities of logs and lumber were swept away, and the aggregate damage was considerable. Evansville was practically cut off as far as railroad transportation was concerned for several days. Railroads operating out of Evansville have, however, up to this time gotten back to pretty nearly a normal condition.

From the mountainous regions in eastern Tennessee and western North Carolina come reports that the damage in those sections was very considerable. Enormous rainfall resulted in devastation, which washed out bridges and railroad tracks and caused considerable damage to buildings, and held up logging and sawmill operations. Of course, in this section the actual damage to lumber is nothing. The chief loss resulted from the suspension of operations and the washing away of structures of various kinds.

A report from Memphis dated April 6 says:

"The crest of the rise in the Mississippi river is rapidly approaching Memphis and will arrive the latter part of this week. S. C. Emery, local forecaster, still insists that the river will go to a stage of between 45 and 46 feet as against the highest previous stage reached in April last year, 45.3. The reading of the gauge this morning showed a stage of 43.7, or within 1.6 feet of the maximum for this city. The river is now rising, but it is said

that the rise, which has been at the rate of about 1½ feet per day for the past few days, will be less rapid during the next few days. The height to which the river will go will be determined in large measure by the resistance shown by the levees. A higher stage would have been recorded last year at Memphis but for the numerous breaks which occurred in the levee system at points in Tennessee and Arkansas, which allowed the waters to spread over a much larger area.

"There have been no breaks so far in the levees in either state. The situation was described as very threatening a couple of days ago at Reelfoot Lake, west Tennessee, where one of the bad breaks occurred last year, but the crest is already at that point and the embankment is still holding, with prospects of continuing to do so. At Wilson, Modoc, Wyandotte and other points in Arkansas where breaks were experienced in 1912, there is a considerable margin, even with a stage of 46 feet at Memphis, and there is a note of optimism in the reports given out by the levee authorities regarding their holding. Major Markham of the United States Army, with headquarters at Memphis, officials of the St. Francis Levee Board and Major Dabney, who has charge of important levees south of Memphis, say that conditions are quite favorable. They emphasize the important part played in the fight by the excellent weather which has prevailed since it became known that the river would go so high. Conditions this year have been in striking contrast with last year in this respect. Then it rained almost every day, making it almost impossible to strengthen the levees and at the same time preventing the embankments, owing to their soggy condition, from having anything like normal resisting power. There has been only one rain in this section during the past few days. Much will depend upon the weather during the next few days, but levee men seem to be of the opinion that the fight has already been won and that there will be no serious crevasses.

"The present high water has already put a number of lumber manufacturing plants in Memphis out of commission and they will have to remain closed down for some days. In North Memphis Moore & McFerren, the Memphis Stave Manufacturing Company, the Tennessee Hoop Company and the Anchor mills have already had to suspend, and in New South Memphis the following are out of commission for the time being: Columbia Package Company, Gillette Brothers, May Brothers, Memphis Band Mill Company and the McLean Hardwood Lumber Company. Private protecting levees were built in New South Memphis, but they were not able to withstand the strain, and lumber interests are suffering to the extent indicated. Other plants will likely be affected before the high water is a thing of the past. May Brothers and others, when they saw that they would be unable to protect their yards, moved their lumber to high ground and thus saved themselves the trouble of having to market a great deal of overflowed stock, as was the case last year. There are some other plants here that will possibly be affected by the decrease in log receipts, but that will depend largely upon how the railroads get through the flood. Last year they suffered heavily and it was impossible even for the mills not affected by the high water to bring in their timber, with the result that the hardwood lumber industry suffered almost complete paralysis for a time. At this writing the Illinois Central, Yazoo & Mississippi Valley, the Rock Island System, the Frisco System and other roads entering Memphis from the West are still intact and are handling lumber, logs and other traffic though on

somewhat delayed schedules. Arrangements have been made to establish boat service between Memphis and Madison and between Memphis and Helena in the event the western lines are put out of commission so that there may not be a complete tying up of westbound traffic as was the case last year.

"The extent to which outside lumber interests will be interfered with will depend almost if not altogether upon the manner in which the levees hold. Large lumber manufacturing firms at Wilson, Proctor, Marked Tree and other points in Arkansas last year had their plants badly damaged and suffered heavy loss through the overflow of their lumber. This was the direct result of the breaking of the St. Francis levee at so many points, notably Golden Lake, near Wilson, Modoc, Wyanoke and other points which filled the St. Francis basin with flood waters. If the levees hold this year those interests which were so badly damaged last year will doubtless escape with only minor loss. Thus, from the standpoint of outside lumber interests, the outlook is regarded as decidedly more favorable than last year.

"The levee at Beulah, Miss., where a serious crevasse occurred last year and where the flood waters of the earlier rise in the Mississippi this year did considerable damage to lumber and other interests, has been repaired to such an extent that it is believed by levee interests that it will hold. The Illinois Central took the matter in hand a short time ago, built a railroad to the break and poured thousands of tons of crushed stone into the crevasse, followed by an equally large amount of dirt. Work is still in progress and there are yet a number of days before the crest of the rise will go so far south as Beulah. In the meantime every possible effort is being put forth to further prepare the new embankment for the protecting service it is to perform."

No considerable damage resulted from the recent floods and storms at Nashville, although there was more or less timber destroyed at different points and the high waters interfered with the operation of mills on river banks and with hauling over rural roads. The amount of rebuilding which will necessarily result from the storm damage will naturally benefit the lumber trade, both wholesale and retail.

At Cincinnati the many manufacturing plants along the Mill-creek valley were either destroyed or so badly damaged as to put them completely out of business for weeks, and business was completely paralyzed. Lumber interests at all these points have been heavy sufferers. Most of the stock in the valley has been swept away and millions of feet of all kinds of building material will be needed for reconstruction work when rebuilding commences. The railroads have also been hit hard, most of their bridges over the many streams having been washed away, and all of the available timber in this city has been bought up by them for the construction of temporary bridges just as soon as the Ohio river recedes so far as to make the work possible. The highest stage of the river was 69 feet 8 inches—just lacking 2 feet 1 inch of equaling the highest water ever known here, in 1884, when it was 71 feet 9 inches. The water was almost up to Third street, the entire west end being completely under water, as was also the east end of the city, while many of the smaller towns across the river in Kentucky were completely submerged, only house tops or chimneys showing where Dayton, Ky., used to be.

The lumber interests at Cincinnati, with few exceptions, were out of business, the big west end yards being probably the worst off. At many of these yards lumbermen, knowing that a high stage of water was inevitable, constructed booms around the yards and thus saved their property, none of which was lost so far as can be learned at this time, although many of the lumber piles floated and upset. Some of the yards were pretty well tangled up and will require more or less reconstruction. There is not likely to be much loss of property to lumbermen on account of the extraordinary precautions taken.

HARDWOOD RECORD's correspondent at Columbus, O., says that the unprecedented flood which swept Ohio during the latter part of March had the effect of paralyzing the hardwood trade in central Ohio. Mail was cut off entirely for almost a week and orders

consequently were infrequent. Railroads were out of commission for some time, and it will require weeks for them to resume their usual state of affairs. Cars loaded with lumber were swept away and lost, and the market in every way was demoralized.

Lumbermen were powerless to help themselves under the circumstances. Business has not yet become normal, although one of the effects of the flood was a good demand for many items in the hardwood trade. Railroads especially, which suffered the loss of many bridges and trestles, purchased all of the timber that they could secure. It is estimated that the loss to the lumber and allied trades in Columbus is well over \$50,000.

The floods did not touch Toledo heavily. There was some raising of the water above normal, of course, and some of the lumber yards situated along the banks of the Maumee river and of Swan creek suffered some losses, although by no means heavy ones. There were some instances of valuable lumber being corralled by grappling hooks, but for the most part the lumber was in good shape and practically all the loss will be occasioned by the necessity for repiling.

Outside of Toledo, at Defiance, Napoleon, Tiffin, Fremont, Piqua, Dayton and other cities, the damage was greater and some large lumber firms have suffered severely, almost the entire stock being lost in a number of instances. Even when the lumber was not carried off the losses on hardwood lumber was great owing to the deterioration of quality caused by the sediment and sand which ground into the timber and made cutting extremely difficult, the sediment dulling the knives.

The tying up of railroad systems has been the most disconcerting thing with the Toledo concerns, as shipments have been refused by the greater share of the railroads here until within the past few days, when conditions have again resumed a normal attitude.

Thousands of dollars' worth of damage was done to hardwood lumber throughout the district, but something can be saved by repiling. The ultimate result of the losses will be an advantage to the lumber trade generally, as thousands of homes throughout the flooded districts will have to be repaired and rebuilt, and this in addition to the building due to the natural growth.

"The Oldest Living Thing"

The story of the great Mexican cypress tree at Santa Maria del Tule is again going the rounds, under the caption, "The Oldest Living Thing in the World." It is said to have a trunk over forty feet in diameter, and estimates place its age at from 5,000 to 6,000 years. Nobody knows how old it is, as there is no history of its youth. The annual rings have never been counted. The tree has been known by white people a couple hundred years, and that is as far back as there is definite information. It has been proposed to bore into the trunk and take out a plug extending from the bark inward a couple of feet, and by counting the rings, estimate the rest, and thus ascertain how old the tree is.

Nothing reliable can be found out that way. It is well known that rate of growth for a large tree has seldom been uniform throughout its whole life. A young trunk nearly always grows much faster than an old one. It is equally impracticable to determine the age of one tree by comparing its size with another whose age is known. That is what some propose doing with the big tree in Mexico; in fact, it has been done already, and argument has been made that since one cypress four feet in diameter was 670 years old, the one in Mexico, which is forty feet through, must be ten times as old. Experience has shown that no such ratio exists.

Coming back again to the big Mexican cypress, it may not be as old as its size indicates. The appearance of the tree itself is the strongest evidence of that, for some who have seen it say it consists of a clump of cypresses, once separate trees, but by enlarging they have grown together, and now form a ribbed and fluted mass which is one trunk but once consisted of several. If that is the case, it is evident that the tree as it stands is no older than the original trees which grew together in the process of forming it. The estimated age, therefore, of 5,000 or 6,000 years should be divided by five or six, at least.

The Mail Bag

Any reader of **HARDWOOD RECORD** desiring to communicate with any of the inquirers listed in this section can have the addresses on written request to the Mail Bag Department, **HARDWOOD RECORD**, 537 South Dearborn Street, Chicago, and referring to the number at the head of each letter and enclosing a self-addressed stamped envelope.

B 421—Has Florida Cedar to Market

Ebensburg, Pa., Apr. 3. Editor **HARDWOOD RECORD**: I wish to secure a market for Florida aromatic red cedar, estimate 3,000 cubic feet. I can deliver at Jacksonville, Fla., and can load for export, if desired.

Any reader wishing to be placed in touch with the above correspondent, can have the address by referring to B 421.—EDITOR.

B 422—Not Affected by Floods

Indianapolis, Ind., Mar. 28. Editor **HARDWOOD RECORD**: The reports that have gone out from this city in regard to the situation caused by the recent floods in this district may have caused some of our customers and friends to think that we would not be able to fill their orders promptly, but we are pleased to state that, fortunately, our plant was not affected by the high waters, and as we have our own water supply and lighting system we have been able to run right along without any interruption. Traffic is now fast resuming its normal condition and all orders and inquiries will have prompt attention.

E. C. ATKINS & CO., INC.,
N. A. Gladding, Vice-President.

B 423—Seeks Sawed or Sliced Gum Veneers

Cincinnati, O., Apr. 1.—Editor **HARDWOOD RECORD**: You recently sent us a list of the annual requirements of users of veneers in this country. However, we would still be more interested in having a list of the makers of veneers, particularly of any people who make sawed or sliced gum veneers, as we do not want rotary cut stock.

The writer of the above letter has been referred to several producers of sawed and sliced gum veneers. Any others interested in the inquiry can have the address on application.—EDITOR.

B 424—Wants Works on Flooring

Detroit, Mich., Mar. 25.—Editor **HARDWOOD RECORD**: I am thinking of going into the business of laying hardwood floors in private residences. I would like to get a book which treats of plain and fancy flooring, giving an estimate of time to do the various kinds of work. If you publish anything along this line, or know of anyone who does, I will be pleased to hear from you.

The writer of the above letter has been referred to various publications and sources of information to secure the facts he seeks.—EDITOR.

B 425—Wants 3/4-Inch Square Oak Strips

Eastwood, N. Y., Mar. 27.—Editor **HARDWOOD RECORD**: We would greatly appreciate it if you will give us the names of various concerns who would be in a position to quote prices on 3/4-inch square oak strips, random lengths, dressed four sides to exact size, from clear stock. We want from 10,000 to 50,000 running feet.

The writer of the above letter has been supplied with a list of concerns that would likely be interested in this inquiry. Any others can have the address on application to "B 425."—EDITOR.

B 426—Wants to Market Osage Orange Logs

Goodland, Ind., Apr. 3.—Editor **HARDWOOD RECORD**: Charles C. Deam of the State Board of Forestry of Indiana, advises me to write you for information concerning Osage orange logs, which wood is used in finishing work of Pullman cars. I have a part of a carload of logs running from 8 to 18 feet in length, and from 12 to 18 inches in diameter.

The writer of the above letter has been advised that we were not aware that the Pullman Company ever employed any Osage orange in the finishing of its cars. He is further advised that Osage orange has but little general demand save in the form of fence posts, but two addresses have been given him, in which it is deemed possible he may be able to market the wood for inlay purposes. EDITOR.

B 427—Use of Sassafras

Texarkana, Tex., Apr. 6. Editor **HARDWOOD RECORD**: Can you give us an idea as to the class of trade that consumes sassafras? Also would like an idea as to the prices for which it sells.

LUMBER COMPANY.

The writer of the above letter has been advised that sassafras is marketed in the form of fence posts, staves for buckets, 2x4 fence rails, 4x6 arbor posts, railway ties, and often in the form of lumber for the production of coffins and moth-proof chests. There is no established price for this wood, but it ranges along pretty closely with poplar values.—EDITOR.

News Miscellany

Meetings of Memphis Club

John A. Fox, secretary-manager of the Mississippi River Levee Association, successor to the Interstate Levee Association, delivered an address before the meeting of the Lumbermen's Club of Memphis at the Hotel Gayoso, Saturday, Mar. 29, in which he asserted that this organization had been launched for the specific purpose of securing from the United States government an appropriation sufficiently large to build and maintain a system of levees adequate for the complete protection of the property and lives of the people of the Mississippi valley. He said that he and those who are associated with him, including some of the most prominent professional and business men in the United States, had come to the conclusion that it was impossible to handle this gigantic problem without the aid of the United States government and that he proposed to go forward with the work of education of public sentiment to such an extent that it would demand this work at the hands of the Federal authorities. He stated that the best engineering thought of the country agreed that the building of the levees and revetment work was the only means of solving this problem and that the separate levee boards could not cope with it. He also declared that it would require a considerable sum of money, about \$50,000 per year, to defray the expenses of the educational campaign which is to be waged during the next three or four years. He thought Memphis ought to contribute at least \$10,000 a year because this city and section would be a direct beneficiary of the work planned. He further expressed the view that the lumbermen of this city and territory should pay at least \$2,000 of this amount.

At the conclusion of his address the club authorized the appointment of a committee to canvass the lumbermen for subscriptions. This work will have to be done by the individual lumbermen rather than through the Lumbermen's Club.

K. D. McKellar, Congressman from the tenth Tennessee district, was also present and told the Lumbermen's Club of Memphis that he would be very glad indeed to draw up a bill authorizing the division of the United States into shipping zones so that hearings before the Interstate Commerce Commission might be facilitated. This was in answer to the request made recently by the club for the introduction of such a bill into Congress. He also said that he was hopeful that it would be possible at the forthcoming session to bring the steamship companies within the jurisdiction of the Interstate Commerce Commission. He said he regarded the commission as one of the most important arms of the government service and that its jurisdiction over the steamship companies in the matter of rates would be of very great assistance to exporters of lumber as well as other commodities.

Mr. McKellar heartily endorsed the address of Mr. Fox and declared that he would be very glad indeed to lend every possible assistance to the plans looking to federal handling of the levee problem. He asserted that he was confident that it could be successfully handled only through the financial resources of the United States government and that the question of states' rights, which had been raised by some interests, could be disposed of without difficulty. He said that it was necessary to have someone on the spot who was responsible for the work to be done and that he did not believe the Mississippi would be properly restrained until someone was placed in charge of the work and gave it his undivided attention.

J. M. Card of the J. M. Card Lumber Company, Chattanooga, was also present. He has been in Memphis for the past few days attending the meeting of the rules committee of the National Hardwood Lumber Association. He said that some changes had been made but that these had been comparatively few. He also said that the committee was counting upon the support of the Memphis delegation to the annual of the association.

S. B. Anderson of the Anderson-Tully Company, was named as the delegate from the Lumbermen's Club of Memphis to the hearing at Chicago in the case of the Pridham Box Company vs. the Southern Pacific Railroad. This involves the question of uniform rates on goods shipped in both wooden and straw board packages. At present goods shipped in the straw board cases take a lower rate than those shipped in wooden containers. This is a matter which is of very great interest to Memphis.

because this is one of the leading plants for the manufacture of shocks and other material used in the manufacture of wooden packages.

The Interstate Commerce Commission has asked for a conference with the lumber organizations in reference to estimated weights on hardwood lumber shipments and uniformity of standards of weighing. The club turned this matter over to the river and rail committee with authority to send a delegate to Washington if it considered this the proper course to take. The conference is scheduled for April 14.

Resolutions were adopted in connection with the recent death of Donald P. Mann.

The Lumbermen's Club of Memphis, at a special meeting held at the Business Men's Club Thursday evening, April 3, rescinded its action at the regular meeting Saturday, March 29, endorsing House Bill No. 524 providing for an extra premium of three per cent on and the payment of \$1 for recording all policies on insurance issued by companies not authorized to do business in Tennessee. There appeared to be considerable disagreement over the endorsement of this bill and it was because of this fact that the subject was brought up at a special meeting. It is given out that the rescinding of its former action does not mean that the club will actively oppose the passage of the measure; but the club is desirous of continuing the fight for lower insurance rates and did not wish its attitude with respect to this bill to prejudice its interests in any way.

The subject was referred back to the law and insurance committee of the club, of which James E. Stark is chairman, and this committee will continue its recent vigorous campaign for lower insurance rates in this city as present rates are regarded as quite excessive and badly out of line with those at points north of the Ohio river.

Coming Meetings

The board of governors of the National Lumber Manufacturers' Association decided at its last meeting that the annual meeting of that association is to be held at Kansas City, Mo., on Tuesday and Wednesday, June 3 and 4. The headquarters will be at the Hotel Baltimore.

President Hamar of the Northern Hemlock and Hardwood Manufacturers' Association announces that the regular quarterly meeting of that association will be held at the Hotel Pfister, Milwaukee, on Apr. 23. A very interesting program is being arranged and full details will be announced later.

Lumbermen's Exchange in Monthly Meeting

The regular monthly meeting of the Lumbermen's Exchange, was held Apr. 3, William T. Betts, president, in the chair. A resolution was passed at this meeting in reply to communication from the State Forestry Association, urging the Pennsylvania senators to vote for the bills known as the "Timberland Taxation Bills." The J. A. Finlay Lumber Company was elected a member of the exchange at this meeting.

On Apr. 10 the election of officers and directors for 1913 will take place, after which the annual banquet will be held on roof garden of the Bellevue Stratford hotel.

Northern Cut and Shipments, February, 1913

The production of hemlock and hardwood lumber continued in February at approximately the same rate as in January, the slightly reduced cut being due to the smaller number of sawing days in February. Shipments kept up well and were in especially good volume considering the excessive shortage of stocks. Much hemlock is being shipped in a half dry condition.

The summary of reports for the last twelve months, given below, shows that during this period, hemlock shipments have exceeded the cut by thirty-seven per cent and that hardwood shipments have gone beyond production by fifteen per cent. Shipments of hemlock and hardwood combined have exceeded production by thirty per cent since Mar. 1, 1912.

Reports from seventy-four firms give these totals for February:

	Sawed		Shipped	
	Firms.	M. Ft.	Firms.	M. Ft.
HEMLOCK	41	17,210	62	30,673
Ash	28	751	14	455
Basswood	35	4,715	37	2,864
Beech	6	103	1	14
Birch	36	8,909	46	5,948
Elm	30	3,072	31	2,291
Maple	33	7,248	33	6,236
Oak	17	331	10	123
Mixed	13	8,272	8	1,413
ALL HARDWOODS		33,401		19,344
Total Hemlock and Hardwoods		50,611		50,017

CUT AND SHIPMENTS NORTHERN HEMLOCK AND HARDWOOD MANUFACTURERS' ASSOCIATION, MAR. 1, 1912 TO FEB. 28, 1913.

Month	Reports	HEMLOCK		ASH		BASSWOOD		BIRCH		ELM		MAPLE		OAK		ALL HARDWOODS	
		Cut	Shipped	Cut	Shipped	Cut	Shipped	Cut	Shipped	Cut	Shipped	Cut	Shipped	Cut	Shipped	Cut	Shipped
March	72	22,984	39,057	840	941	5,392	2,821	8,561	6,436	3,055	2,335	6,127	4,564	511	353	33,928	22,447
April	72	30,458	43,565	588	808	5,084	3,041	9,737	6,614	3,153	2,203	6,804	4,412	260	430	33,625	22,421
May	75	43,781	61,181	596	800	3,481	2,724	9,882	8,261	2,220	1,791	6,963	6,530	497	254	31,228	25,246
June	78	59,720	59,655	845	703	3,864	4,380	7,824	7,478	2,611	2,312	7,401	6,814	347	248	26,231	25,605
July	76	51,556	58,392	370	891	2,445	5,353	5,075	9,136	2,633	2,581	5,365	7,510	152	232	18,831	30,321
August	70	53,954	54,459	356	1,038	2,938	5,390	4,288	11,173	1,667	3,132	4,578	10,618	151	303	15,671	35,770
September	71	36,094	51,316	291	830	2,214	4,115	3,452	10,540	1,092	2,405	4,264	6,741	121	387	12,796	28,302
October	74	31,098	52,570	263	987	2,342	6,198	3,571	10,958	1,161	3,426	4,961	8,468	53	390	13,411	34,309
November	73	21,522	39,282	259	1,137	2,363	6,499	3,857	10,251	1,087	3,254	4,618	8,003	42	165	12,618	32,113
December	76	15,738	32,257	260	808	2,600	3,690	4,774	7,592	1,617	2,060	4,649	5,975	30	386	17,043	23,176
January	73	24,090	32,800	882	802	5,434	3,518	9,797	6,967	3,293	2,126	7,506	7,954	370	360	33,061	23,835
February	74	17,210	30,673	751	455	4,715	2,864	8,909	5,048	3,073	2,291	7,248	6,236	331	123	33,401	19,344
Total		405,185	555,207	6,301	10,200	42,872	50,593	79,727	101,354	26,661	20,916	70,484	83,825	2,765	3,632	281,844	322,889

Lumbermen's Exchange Annual Dinner

Tonight, Apr. 10, the Lumbermen's Exchange of Philadelphia, is enjoying its annual dinner, following the twenty-seventh annual meeting. The meeting and dinner are being held at the Bellevue Stratford hotel, Philadelphia, the latter being called at seven o'clock.

Philadelphia Lumbermen Discuss Golf

The Philadelphia Lumbermen's Golf Club, is making ready for an active golfing season. The executive committee, composed of J. W. Turnbull, chairman; J. B. McFarland, Jr., R. W. Wister, Ralph Souder and William T. Betts, held a meeting at the Lumbermen's Exchange rooms, Mar. 31, at which it was decided to open the season with a contest on the Riverton Country Club course, Riverton, N. J., in the latter part of April. A handsome silver cup has been presented by the New York Lumber Trade Journal to the Philadelphia Lumbermen's Golf Club, to be contested for in any manner the club may decide.

Chicago Lumbermen in Monthly Meeting

The monthly luncheon and meeting of the Lumbermen's Association of Chicago took place in the red room of the Hotel La Salle on Tuesday, Apr. 1. The usual dinner was well attended and after its completion, President Murdock MacLeod opened the regular business session. The chief question brought before the members had to do with the proposed lumbermen's building for Chicago.

George J. Pope, chairman of the special committee appointed at the meeting on Feb. 10, reported in detail on the work done by that committee in outlining the possible advantages to be derived from the erection of such a structure. He also outlined different ways through which such a building could be financed and its floor space fully rented to concerns in the lumber and allied trades.

Mr. Pope stated that the secretary of the association sent out a general letter on Feb. 26, and at the time of the report there were eighty replies received, of which seventy-five were favorable.

Mr. Pope in his report further stated that it was recognized that the lumber companies alone could not support such a building, and that the question which confronts the special committee has to do with arrangements whereby industries allied with the lumber business could be housed in the same building. It is quite likely that in addition to the Lumbermen's Association headquarters, and the Lumbermen's Club quarters, the various industries closely connected with the lumber business will be given an opportunity of taking office space in the Lumbermen's building. Such trades would be the building trades, stair builders, interior finish houses, etc.

Mr. Pope said that at present there is more office space to be rented in Chicago than there is a demand for, and those in charge should move carefully in putting through a proposition as suggested. He said that 275 letters were sent out on Feb. 26, and up to Mar. 31 replies had been received from seventy-five concerns renting in the aggregate 46,886 square feet of floor space, with an average rental of \$1.64 per square foot. Mr. Pope said that the owners of the new building if it were erected would assume unexpired leases, and would not ask the lumbermen to buy any bonds or subscribe to any stock.

Following a discussion of the plan the meeting adjourned.

Decision on Switching at Baltimore

A decision of much interest to lumbermen was handed down on Mar. 26 in Circuit Court No. 2 by Judge Duffy, when he issued an order sustaining in part and annulling in part the order of the Public Service Commission which fixed the switching charges by railroads in local territory. The order of the commission is sustained and the temporary injunction dissolved in so far as it decrees that the rate for yard switching shall be \$1 per car and for industrial switching not more than \$5 per car. The order of the commission is voided and the injunction against its enforcement made permanent as to that part which provided for connecting line and for intermediate switching. The commission had attempted to fix specific rates for switching from one line of railroad to another, and it was this portion which the court knocked out, the contention of the railroads having been that to sustain such a requirement would virtually mean the loss of traffic and the giving of the benefits of their terminals to competing railroads. A shipper, for instance, finding that the switching rate is a certain amount, might be able to figure out that by shipping over one road he could have his shipment switched to the terminal of the other at a cost perhaps lower than the rate on a through shipment over the road owning the terminal where he wants the car placed. As to the yard and industrial switching charge, the court said it was not convinced, as the railroads contended, that the

rates were confiscatory and unreasonable, and that where there appears to be a narrow margin between possible confiscation and proper regulation, and if the result depends on future operation, the court should not enjoin the enforcement of the order before there has been a fair trial of the new rate. The switching charge agitation dates back several years, various trade bodies here, among them the Lumber Exchange, having, in 1911, instituted proceedings before the Public Service Commission of Maryland and the Interstate Commerce Commission against the railroads having terminals here to obtain a reduction of the charges on the ground that these were extortionate, unreasonable, and burdensome, and that they placed the Baltimore shippers at a great disadvantage as against manufacturers in other cities, with whom they could not compete under the circumstances, the margin of profit being often wiped out by the higher switching charges here. The proceedings before the Interstate Commerce Commission culminated May 14, 1912, in an order to the railroads to establish within thirty days joint rates for the interchange of interstate traffic, the maximum rates to be charged for the service being set forth and exceeding the expectations of the shippers. The Maryland Public Service Commission issued an order on May 31, of the same year, establishing a switching district to include all of Baltimore City and a small territory outside of it, and providing for certain flat rates per car moved within this district, the rates being substantial reductions from those of the railroads. The railroads then appealed to the courts and a temporary injunction was issued, which has now as above stated, been sustained in part and voided in part.

Lewis Doster Makes Change

Lewis Doster for years well-known as the efficient secretary of the Hardwood Manufacturers' Association of the United States, recently completed arrangements for a change in his business activities. He is severing his connection with this association, this connection having been officially severed on March 15, 1913, at which time he was officially engaged to act as general representative for the well-known saw firm, Joshua Oldham & Sons, Inc., Brooklyn, N. Y. Mr. Doster will represent this firm throughout the entire middle western territory, and will maintain an office in the First National Bank building, Cincinnati, O.

While the connection nominally started Mar. 15, Mr. Doster has done nothing actively in his new work, but is still, secretary of the association, with the understanding that he will remain in that position until other arrangements can be made as to his successor.

Mr. Doster states that he made the change after looking over the field thoroughly. Mr. Doster's wide acquaintance among the hardwood manufacturers of the country will stand him in good stead in his new position. He will not, however, limit his trade to hardwood mills, but will cover the sawmills manufacturing every kind of lumber in the Middle West.

Lumber Fraud Case Progressing

United States District Attorney Swartley outlined the government's case against the International Lumber & Development Company before the United States district court at Philadelphia, Pa. He declared to the jurors that the prosecution would show that the defendants had defrauded stockholders of the concern out of \$6,000,000 by false representation and misleading literature circulated through the mails. He asserted that 288,000 acres of land alleged to have been owned in Mexico by the defendant was in reality owned by a New Jersey corporation. He further declared it would be shown that the so-called dividends paid semi-annually by the company were not out of the earnings but out of the money collected from the stockholders. He further declared that it would be proven that the company cut only about one-third of the lumber reported cut and that not much of this was cut on the property claimed to have been owned by the company.

The government attorney said that while the International Development Company's circulars claimed that that concern was doing an immense mahogany business; in reality most of the alleged mahogany logs were oak logs. The attorney raised a laugh when he declared that the much advertised "great International fleet" maintained by the company for transportation purposes consisted of one ocean going steamer, one launch, two sail-boats and two row boats.

The defendants are John R. Markley of Chicago; Isaiah B. Miller of Chicago; Charles B. McMahon, secretary and treasurer of the company; Colonel A. G. Stewart, director and commissioner of the company; William Armstrong Jr., general agent for the concern.

The government's attorneys showed methods employed by the company in the sale of its stock, the display of products alleged to have

been grown in Mexico, and the circulation of literature through the mails. Several witnesses were examined.

The latest development in the trial was the reading of a lot of literature sent out by the International Lumber & Development Company in order to prove that this concern used the mails to defraud Alexander Williams, president of the Astoria Veneer Mills & Dock Company, Long Island City, N. Y. Mr. Williams testified that he had signed a contract with John R. Marshall, one of the defendants, to receive and saw logs shipped from the plaintiff. He told of the various shipments received and said the wood was small and unsatisfactory, and that nothing could be said in its favor. He testified that the treasurer of the International company had said that a better quality of timber would be shipped as soon as the better trees could be reached.

Mr. Williams said that W. H. Armstrong, Jr., of the International company in 1905 had asked permission to take photographs of piles of logs belonging to the International company which had been shipped to the plaintiff. He said that Armstrong had taken several pictures which were printed in newspapers and literature, and were represented to be views of piles of mahogany owned by the International Lumber & Development Company. The witness was shown the pictures and declared that one the company claimed to be a pile of valuable mahogany was not mahogany at all, but a pile of English oak logs.

Another representation of a pile of mahogany, according to the witness, was a pile of Mexican mahogany logs belonging to Lewis Thompson & Co., which had been lying in the witness' lumber yard preparatory to being manufactured.

Another was a pile of African mahogany shipped from Africa, and not owned by the International Lumber & Development Company. Still another represented and purported to be mahogany logs really showed maple.

Cadillac Concern Moves to Grand Rapids

A. F. Anderson, who for fifteen years has done a wholesale lumber business at Cadillac, Mich., has decided to move the headquarters of that business to Grand Rapids, Mich., where they will be maintained in conjunction with the offices of the Van Keulen & Winchester Lumber Company in the Michigan Trust Company building. The change will be made some time during the present month.

A. F. Anderson has been in Seattle, Wash., for over a year and will continue to make his home in the Far West. A. F. Anderson's son, who has with Adrian Van Keulen been in active charge of the business, will also make his home in the West. Adrian Van Keulen will continue in charge of the Grand Rapids office.

Red Gum Lumber Company Starts Business at New Orleans

One of the newest organizations starting in the hardwood business in Louisiana is the Red Gum Lumber Company, a concern with \$50,000 capital, which has opened offices in the Maison Blanche building. H. B. Turner is vice-president and general manager and will have active charge of the business.

The company has the entire sale of four Louisiana hardwood mills, having an aggregate daily output of 100,000 feet, which is made up of gum, tupelo, elm, cottonwood, oak, ash and magnolia. It is its aim to do a general wholesale business, both domestic and export.

Mr. Turner has been with Phil I. Adam, prominent in New Orleans as an exporter for a number of years. He severed his business connection with Mr. Adam in order to engage in the new enterprise. Mr. Turner's experience in hardwoods has been extensive, and he is widely and favorably known in hardwood circles.

New York State Forestry Students Get Valuable Experience

The practical work covered by the students of the New York State College of Forestry at Syracuse offers a variety of subjects which result in a broad education on various subjects dealing with the administration of New York forests. The students of the State Rangers School have been making maple sugar on the college forests of 1,800 acres near Cranberry Lake. The school has a complete outfit of spouts, buckets and evaporators, and is in every way well equipped to make sugar and syrup. This work is part of the rangers' instructions.

Ten of the older students of the college of forestry left Syracuse recently for two weeks of practical work in the state nursery at Salamanca, N. Y., where they are working under the direction of Superintendent Warner of the nursery. They are employed as day laborers taking up every line of work in the nursery, such as lifting seedlings and transplanting them and packing transplanted plants for shipment. They also prepare the ground for seed beds, and perform the various other duties necessary in connection with forest nursery work.



LEWIS DOSTER, CINCINNATI, NEWLY APPOINTED GENERAL REPRESENTATIVE OF JOSHUA OLDHAM & SONS, INC.

A Directory of Commercial Organizations

In response to a Senate resolution passed December last, the Department of Commerce has submitted to the Senate a list of the commercial organizations in the United States. This record, with a list of agricultural organizations, will be printed for distribution, provision being made for 1,500 copies for the use of the Senate. The list of commercial organizations was prepared by the Bureau of Foreign and Domestic Commerce, which for nearly two years has been collecting for use in its own work detailed information regarding such organizations, their functions, membership, income, etc. The information in the files of the bureau at the time the resolution was adopted was supplemented by such additional facts as it was possible to obtain before Feb. 15, the date on which the list was to be submitted to the Senate, and this list when published will record about 3,500 national, interstate, state and local organizations.

In the compilation of its information the bureau has utilized various symbols to indicate the field of service and the activities of the various organizations. These symbols have been used in the list submitted to the Senate, so that when published it will furnish in a concise manner a complete record of the organizations, their functions, membership, and other details. The information thus compiled constitutes a directory of commercial organizations of the country such as has never before been prepared and it should prove of practical value to business men.

In addition to the 1,500 copies to be printed for the use of the Senate, the list will be issued as a bulletin of the Bureau of Foreign and Domestic Commerce (Miscellaneous Series No. 8). Copies of this bulletin will be sold for fifteen cents a copy by the Superintendent of Documents, Government Printing Office, Washington, D. C.

A Human Visage Photographed in Log

In connection with this story is seen a really remarkable likeness of human features, which was found on the inside of a block of maple cut at Cadillac, Mich. A representative of HARDWOOD RECORD was recently calling at the office of the Williams Brothers Company, Cadillac, and while enjoying a talk with George F. Williams, the conversation was suddenly interrupted by the intrusion of a man of rather unusually striking appearance. He was tall and shaggy, with a small bullet-shaped head, the most prominent characteristic of which was a long, sharp, rugged face. The forehead was low and narrow and the eyes small. The nose and beard were of truly remarkable length and sharpness.

Upon the intruder's withdrawing, the caller remarked on the unusual appearance he showed. Mr. Williams then with a smile stated that he was an old scrap iron dealer, and then still smiling pointed without speaking to the mantel over the fireplace in his office. Here the block shown in this connection was placed, and the caller was instantly struck with the remarkable resemblance between the profile shown in the block and that of the iron peddler. It seemed that the coincidence was worthy of recording, and the photograph shown was secured.



FREAK STAIN IN A LOG CLOSELY RESEMBLING AN ACTUAL PERSONAGE.

Champion Lumber Company Starts Operations

The last week in March saw the first cut of logs on the timber holdings of the Champion Lumber Company with headquarters at Sunburst, N. C. The first logs were brought to the mill at Sunburst on Mar. 25, and the mill is now operating. It is estimated that it has at least a twenty years' cut ahead. The capacity of the mill is from 135,000 to 175,000 feet daily.

The town of Sunburst is thirteen miles from Canton, N. C., in the Pigeon River region on the Tennessee & North Carolina Railroad. It now has about 500 residents. The operation will bring in at least 1,000 more men so that in the near future the population of the town will be from 2,000 to 3,000.

Broad plans have been laid for making a permanent town of Sunburst, with church, schools and other necessary structures.

Slight Changes in National Hardwood Rules

It is reported from Memphis, Tenn., that there was a conference during the early part of the week between H. A. Hoover, chief inspector of the National Hardwood Lumber Association, J. M. Card of Chattanooga, and J. M. Pritchard and John W. McClure of Memphis, Tenn., members of the inspection committee. These men were appointed as a sub-committee to the regular grading rules committee. The object of the sub-committee's work is to put proposed changes in such form that they will be readily understandable. So far nothing very radical has been proposed.

Increase in Capital Stock

A communication from the Mansfield Hardwood Lumber Company of Shreveport, La., states that at a recent meeting of the board of directors of that company, the paid up capital stock was increased from

\$50,525 to \$100,000. The Mansfield Hardwood Lumber Company deals in hand-sawed hardwood lumber, specializing in thin oak and ash. Its white oak is well equalized and is of true forked-leaf variety.

The company has band mills at Mansfield and Winnfield, La. It maintains a hickory strip mill in connection, and turns out buggy shafts, rims, poles, etc.

Trip Planned by Arkansas Lumbermen

The Lumbermen's Club of Arkansas is completing arrangements through its secretary, E. R. McIntyre of Pine Bluff, Ark., for a proposed trip of the club members to include every sawmill in the state. It is planned to charter a special train of Pullmans, on which the lumbermen will live during the entire trip. This train will leave Little Rock on May 19.

Mr. McIntyre is secretary of a special committee appointed to carry on the work, and is assisted by C. J. Baer and C. A. Bushnell. Most of the work involved has already been accomplished. It is expected that fully one hundred Arkansas lumbermen, members of the Arkansas Lumbermen's Club, and especially invited guests, will take the trip. From these figures it can be seen that the special train will be of considerable length inasmuch as in addition to the sleepers it will carry a baggage car, dining car and observation car.

The trip will have as its object the unifying of methods through observation on the part of each member of the operations of others. It is also planned to considerably stimulate interest in the possibilities of developing cut-over lands.

The Arkansas Lumbermen's Club is of rather recent origin, but it is considerably alive in every detail of its work. The club consists of seventy-five members, all of whom are large manufacturers.

Cincinnati Plant Burns

On Thursday night, Mar. 27, the extensive lumber and millwork plant of Chas. S. Ferris, located in the east end of Cincinnati, was destroyed by fire. The destruction of the plant is complete so far as can be ascertained at this time due to the high water which has since completely submerged the territory where the mill stood. The loss will total about \$40,000 and is covered by only about \$25,000 insurance. Chas. S. Ferris did a retail business principally in yellow pine and also was a manufacturer of all kinds of millwork for the building trade, most of which was on special orders.

Fire Destroys Arkansas Yard

T. J. Ellis & Co., Ellisville, Ark., advise that fire broke out on Saturday morning, Mar. 22, in their lumber yard at Ellisville and destroyed 650,000 feet of hardwood lumber. The loss incident to the fire was \$25,000. The company had only \$15,000 insurance on the whole yard, including lumber valued at \$25,000, which was not destroyed. It is supposed that the fire originated in a pile of pecky cypress and that it started with a cigarette which some one had thrown into the lumber.

Advanced Idea of the Underwood Veneer Company

The Underwood Veneer Company of Wausau, Wis., has just inaugurated a new plan which will work to the great benefit of the boys employed at its plant. Instead of taking its boy employees' entire time, it has arranged to work them in two shifts. About twenty boys in all are employed at the factory and they will work in relays of ten each. In other words, ten boys will work in the morning and attend school in the afternoon for a week, while the other ten are at school in the morning and at work in the afternoon. In order to equalize the benefits, the relays are shifted each week. This enables the boys to get more schooling than they possibly could under the five-hour plan, and further enables the Underwood Veneer Company to carry out its ten hour working schedule at the mill. This plan exemplifies the modern conception of the employer's relation to his employees.

German Agent Opens Paris Office

Richard Koeller of Hamburg, Germany, advises HARDWOOD RECORD that in the latter part of March he established a branch office at 8vis avenue Persier, Paris, France. The new office will be under the management of Ed. Leisieux-Sigaux. Mr. Koeller is the German selling agent for all kinds of American lumber and logs, oak staves and headings.

Philip A. Ryan Builds New Hardwood Mill

The Philip A. Ryan Lumber Company of Memphis, Tenn., recently completed and put into operation its new hardwood mill at Onalaska, Tex. The equipment of this plant is modern in every respect and undoubtedly represents the finest type of hardwood mill construction. It has a capacity of 50,000 feet daily. The prospect for trade in the very beginning of the operation is that it will continue to run to capacity constantly.

Escanaba Lumber Company Will Build New Mill

The sawmill of the Escanaba Lumber Company of Masonville, Mich., which was burned about a year ago, will be replaced shortly according to an official statement emanating from the offices of the Escanaba Lumber Company. It has not been definitely decided as yet whether the new mill will be erected at Masonville, Escanaba or some other point. The company has recently made large purchases of timber, and it desires to have the mill as convenient as possible to these holdings. The company is arranging for the purchase of a complete equipment for the proposed new plant. This machinery will consist of two band mills and a resaw. It is planned to have the equipment and arrangement equal to that of any mill on the upper peninsula.

The recent timber deal in which the Escanaba Lumber Company was involved, secured for it extensive stands of timber in Alger, Schoolcraft and Luce counties. The consideration amounted to \$230,000.

Building Operations for March

Official reports from forty-five cities throughout the country, compiled by The American Contractor, Chicago, show a loss for March of 3½ per cent, as compared with March, 1912, and the first 3 months, as compared with the like period in the past year, show a gain of 5 per cent, the cities gaining being as follows: Akron, 7 per cent; Baltimore, 40; Buffalo, 21; Cedar Rapids, 38; Chicago, 83; Grand Rapids, 13; Harrisburg, 3; Indianapolis, 96; Los Angeles, 8; Manchester, 10; Milwaukee, 52; Nashville, 143; Newark, 94; Omaha, 9; Philadelphia, 32; St. Joseph, 179; St. Paul, 54; Scranton, 31; Seattle, 33; South Bend, 18; Toledo, 51; Wilkes-Barre, 6; Worcester, 60. For the three months the largest percentage of gain was scored by Duluth, 558, St. Joseph, 179, and Nashville, 143. Particulars will be found in the following table:

City.	March,	March,	Per Cent	
	1913.	1912.		
	Cost.	Cost.	Gain.	Loss.
Akron	\$ 235,060	\$ 190,710	23	..
Baltimore	814,871	561,375	45	..
Buffalo	1,694,743	507,000	234	..
Cedar Rapids	151,000	124,000	22	..
Chicago	7,690,600	4,743,600	62	..
Columbus	307,328	458,966	..	33
Denver	322,400	591,650	..	46
Duluth	1,797,265	114,125	94	..
Ft. Wayne	209,672	293,000	..	28
Grand Rapids	184,750	123,780	49	..
Harrisburg	141,555	99,075	43	..
Hartford	453,505	830,100	..	43
Indianapolis	754,305	558,780	35	..
Kansas City	911,260	616,730	48	..
Los Angeles	3,034,213	1,687,780	80	..
Manchester	91,480	73,801	24	..
Memphis	573,321	499,000	15	..
Milwaukee	655,389	430,987	52	..
Minneapolis	755,885	1,272,215	..	41
Nashville	186,654	75,163	148	..
Newark	1,173,888	790,234	47	..
New Haven	289,482	806,455	..	64
New Orleans	553,301	772,790	..	28
Manhattan	9,287,233	17,142,599	..	46
Brooklyn	3,018,295	4,686,495	..	36
Bronx	3,290,178	3,400,245	..	3
New York	15,595,706	25,229,339	..	38
Norfolk	378,177	256,740	47	..
Oakland	812,394	673,146	21	..
Omaha	265,575	254,400	4	..
Paterson	137,187	311,245	..	56
Philadelphia	6,206,500	3,691,895	41	..
Pittsburgh	716,817	1,517,452	..	53
Portland	868,760	1,782,441	..	51
Rochester	732,941	1,506,838	..	51
St. Joseph	78,370	22,085	255	..
St. Paul	1,063,286	455,014	112	..
San Antonio	193,830	221,360	..	12
Scranton	86,306	55,950	54	..
Seattle	768,850	848,985	..	9
Sioux City	155,535	72,145	116	..
South Bend	33,802	38,700	..	13
Toledo	382,255	417,271	..	8
Wilkes-Barre	167,311	101,776	64	..
Worcester	469,812	263,199	78	..
Total	\$52,095,281	\$53,441,297	..	3½

Kentucky Lumber Company Loses Logs

The log booms of the Kentucky Lumber Company at Burnside, Ky., broke on Mar. 31 due to the excessive rise of the Cumberland river. Fifteen thousand logs were swept away. Most of these were high-grade oak and poplar and every effort was made immediately to again get hold of them. As a result of strenuous efforts a large percentage of the logs were recovered, and the loss was comparatively slight. The Kentucky Lumber Company's headquarters are at Cincinnati, O.

Philippine Timber Company Ready for Operation

It is announced that a company of eastern capitalists is forming a gigantic organization for the purpose of exploiting the hardwood timber of the Philippines. The active representative of this proposed concern is D. A. Utter, surveyor-general of Idaho. Mr. Utter recently returned from a trip to the Philippines where he spent five years investigating the forest resources of the islands, and laying out the best possible plans for milling and transporting of forest products.

It is probable that a line of freight steamers will be established bringing the lumber to various ports of this country and abroad. The backers of the proposed company are now negotiating for two tracts of 500 square miles each on one of the islands.

New Pittsburgh Concern

The Manufacturers' Lumber Company is the style of a new organization which has just begun business at Pittsburgh. The company will have offices in the Park building, and will carry on a general wholesale lumber business. C. M. Pomeroy is president, E. J. Flautt, vice-President and A. E. Murphy, secretary and treasurer. Mr. Pomeroy has been connected for sometime with the Babcock lumber interests. Mr. Flautt has been associated with the Goodyear Lumber Company, Buffalo, while Mr. Murphy has conducted a concern in Pittsburgh under his own name.

There will be no connection between the new concern and any of the old companies represented.

Issues New Manufacturers' Rules

According to the latest bulletin of the Hardwood Manufacturers' Association of the United States, dated Mar. 26, the new issue of the grading rules is about ready for distribution at this date. These rules will become effective May 1. It is suggested by the bulletin that members requiring copies of the new issues send in their requests for the same as promptly as possible in order to give an idea of the number of books which will have to be printed.

There are quite a number of interesting changes, and the bulletin further advises that if any information is wanted regarding the interpretation of the new rules, the office of the association will be glad to explain further.

New Road for Memphis Concern

The Batesville and Southwestern Railroad connecting Batesville, Miss., on the Illinois Central, and Charleston, Miss., on the Yazoo & Mississippi Valley, will soon be completed. This road runs through the timber holdings of R. J. Darnell, Inc., Memphis, Tenn., and will tap a richly timbered area. It will enable Mr. Darnell to secure a vast quantity of logs in territories which he has not worked up to this time.

Hardwood News Notes

< MISCELLANEOUS >

The Florence Wagon Works is reported to be reorganizing at Florence, Ala.

The Ludington, Wells & Van Schaick Company is organizing at Menominee, Mich.

The C. O. Biggs Chair Company, Dexter, Mo., has incorporated with a capitalization of \$8,100.

The Elkhart Furniture Works, Elkhart, Ind., has been incorporated with a \$10,000 capital.

The Brownlee Company will succeed the Brownlee-Kelly Company, Detroit, Mich., on Apr. 30.

An involuntary petition in bankruptcy has been filed by the Rockford Novelty Works, Rockford, Ill.

The capital stock of the Allegheny Lumber Company, Pittsburgh, Pa., has been increased to \$50,000.

The Charlevoix Lumber Company, Charlevoix, Mich., has incorporated, the capitalization being \$500,000.

The Knoxville Veneer Company, Knoxville, Tenn., has increased its capital stock from \$25,000 to \$50,000.

The Booker-Cecil Lumber Company, Louisville, Ky., has incorporated with an authorized capital stock of \$50,000.

At Asheville, N. C., the Wolf Manufacturing Company has been incorporated with a capital stock of \$150,000.

The Unique Furniture Manufacturing Company has been incorporated at Flint, Mich., with a capital stock of \$150,000.

The Carolina Veneer Company has been incorporated at Biltmore, N. C. This company has a capital stock of \$50,000.

The Snyder & Fuller Furniture Company, Lake Odessa, Mich., has been succeeded by the Denton & Chappell Manufacturing Company.

A decrease in capital stock has been made by the Compressed Wood Preserving Company, Cincinnati, O., from \$200,000 to \$50,000.

The Ovid Furniture Manufacturing Company has been organized at Ovid, Mich. The company has a capital stock authorized of \$80,000.

The Sprigg Lumber Company has been organized at Weston, W. Va., with a capital stock of \$15,000. The company will deal in forest products. The name of the Michigan Hearse & Carriage Company at Grand Rapids, Mich., has been changed to the Michigan Hearse & Automobile Company.

The Snyder Manufacturing Company, a furniture concern of Logan, O., is planning to rebuild its plant which was destroyed by fire at that point several months ago.

The Allis-Chalmers Company, Milwaukee, Wis., has incorporated under the style of The Allis-Chalmers Manufacturing Company with a capital stock of \$42,500,000.

The Scarritt-Comstock Furniture Company recently leased a plot of ground at Main and Dock streets, St. Louis, where it will erect and operate a furniture factory.

Henry Isserman & Son of Bealville, Ind., are planning to start their new veneered door factory at that place by the first of May. The plant will have an output of 200 doors a day.

The dimension plant of Holmes & Balmer, Lima, O., was recently completed. This company will specialize in wagon stock and baseball bats. Its plant is modern in every particular.

The Three States Manufacturing Company, Kenova, W. Va., has been succeeded by the Breece Manufacturing Company, which concern has its headquarters at Portsmouth, O., manufacturing rims and spokes.

The Section-fold Company, Inc., has been incorporated at Brooklyn, N. Y., with a capital stock of \$25,000. The company will manufacture cabinets, sectional cases, etc., and will deal in lumber of all kinds.

The Forsythe Dining Room Furniture Company recently incorporated at Winston-Salem, N. C., will shortly erect a new plant for the manufacture of dining room furniture. This company has a capital stock of \$250,000.

The sawmill plant of the Southern Lumber & Boom Company at Valley View, Ky., on the Kentucky River, has been purchased by Milikan & Aldridge of New York, and has been shipped to Irvine, Ky., where it will be rebuilt and become part of that firm's extensive operations there.

J. F. McIntyre & Sons, Inc., are spending considerable money in improving the hardwood sawmill at Pine Bluff, Ark. In addition to doubling the capacity of the power plant, a new vertical resaw and a heavy trimmer and edger will be installed, which it is anticipated will double the capacity of the mill.

The Fordyce Manufacturing & Ice Company of Fordyce, Ark., is busily engaged in reconstructing and enlarging its hardwood mill at Fordyce. The old plant will be entirely removed and set up again on the Rock Island road in that city. The present plant is on the Cotton Belt. The sawmill is equipped with circular saws, and will have a capacity of 35,000 feet per day.

CHICAGO

John S. Weidman, of Mount Pleasant, Mich., president of the Weidman & Son Company, Trout Creek, Mich., spent a few days in town this week.

H. W. Nurdyke of the Adams & Raymond Veneer Company of Indianapolis, Ind., was in town the early part of this week. He says that his plant, though shut down, was not damaged by the flood and is now operating normally.

The fourteenth annual special issue to the Timber Trade Journal published at London, England, dated Mar. 29, is a most unusual number in every respect. It contains 325 pages of reading matter and advertising, and the feature is an historical review of the development of the lumber industry in English, Scottish and Swedish points.

E. B. Nettleton, well known in lumber and lumber trade journal circles, has just started the wholesale and commission business in hardwoods, Inland Empire and Pacific coast products. Mr. Nettleton is maintaining an office in the Fisher building.

I. A. Minnick, vice-president of the National Dry Kiln Company of Indianapolis, was in Chicago for several days last week, and favored *HARDWOOD RECORD* with a call.

W. D. Wheeler of the Wheeler-Bissell Lumber Company, Marshfield, Wis., made a business trip to Chicago last week.

I. A. Bushong of the Northwestern Cooperage & Lumber Company, Gladstone, Mich., has been in the city on business for several days.

Walter N. Kelly, the hardwood man of Detroit, was in Chicago on a business visit on Apr. 8.

E. B. Norman of the Norman Lumber Company of Louisville, Ky., and Holly Ridge, La., was in the city the latter part of last week.

Louis Doster, secretary of the Hardwood Manufacturers' Association, who will shortly take up his duties as general representative of Joshua Oldham & Sons, Brooklyn, N. Y., was in Chicago most of last week.

F. T. Peitch, prominent in lumber circles at Cleveland, O., called at this office on Mar. 28.

George M. Cornwall, the capable editor and publisher of "The Timberman", Portland, Ore., was a welcome caller at this office on Apr. 8. Mr. Cornwall was in Chicago attending the box case hearing before the Interstate Commerce Commission on behalf of the Pacific coast box interests. Before leaving for home he will visit his mother and other relatives at New York.

F. F. Fee of the Fee-Crayton Hardwood Lumber Company, Dermott, Ark., was a visitor at Chicago during the week. Mr. Fee has been away

from his office for a couple of months and is planning to sail on May 10 for an extended business trip abroad. He will be accompanied on this trip by some of his associates.

M. L. Pease of the Galloway-Pease Company of Saginaw, Mich., and Poplar Bluff, Mo., was in the city on business for a few days last week.

E. W. Benjamin, manager of the Cadillac Veneer Company, Cadillac, Mich., was in the city for a few days this week on business.

J. C. Knox, secretary of the Michigan Hardwood Manufacturers' Association, Cadillac, Mich., and R. S. Kellogg, secretary of the Northern Hemlock and Hardwood Manufacturers' Association, Wausau, Wis., attended the hearing in Chicago on Apr. 3 and 4 on the Pridham case, as extended from the Los Angeles, Cal., hearing, involving rates on wooden vs. fiber containers.

Horace Taylor, president of Taylor & Crate, Buffalo, N. Y., was in the city on business some time ago, and favored *HARDWOOD RECORD* with a call on Mar. 25.

F. D. Timlin of the Wheeler-Timlin Lumber Company, Wausau, Wis., spent several days in conference with his partner in Chicago, the early part of the month.

W. M. Stephenson, Supreme Scrivener of Hoo Hoo, spent the last few days of March in Chicago.

E. H. Donaldson of Mason-Donaldson Lumber Company, Rhinelander, Wis., was one of the distinguished visitors to the local trade recently.

W. A. Ranson of the Gayoso Lumber Company, Memphis, Tenn., made a visit of several days' duration with the Chicago trade, the early part of the week.

E. E. Taenzer of I. M. Darnell & Sons, Memphis, Tenn., spent the week of Mar. 24 with the local trade.

C. B. Allen, manager of the veneer department of the Anderson-Tully Company, Memphis, Tenn., has been in Chicago for a couple of weeks on a selling trip.

J. A. Levings, president of the Moorhead Manufacturing Company, Moorhead, Miss., spent the first week in April with the local trade on a business trip.

NEW YORK

E. H. Barton of Barton, Thompson & Company, lumber and timber importers of London, England, is on a business trip to American mills. This firm is one of the largest importers of American lumber, and Mr. Barton is well-known to manufacturers in the States.

George M. Stevens of the Stevens-Eaton Company, prominent wholesaler, is on a trip to the Pacific coast lumber markets in the interest of business. In addition to its hardwood lumber department this company handles a large volume of softwoods including Pacific coast stocks.

A visitor to New York during the fortnight was Hugh McLean, the prominent Buffalo hardwood lumberman. Mr. McLean spent several days in town in the interest of business.

The Santo Domingo Hardwood Company recently took offices in the Hudson building, 32 Broadway, this city.

The Milne Brothers Company, wholesale hardwood specialist of 18 Broadway, has been incorporated under the same style with a capital of \$30,000. The incorporation is nothing but a formality and the business will be conducted as heretofore without any change.

Jesse C. Hofer, for many years prominent in the wholesale trade of this city, has engaged in a selling capacity with the Blanchard Lumber Company, and will assist Manager Loomis of the New York office. Mr. Hofer had been out of active business for some time because of ill health but is now fully recovered and ready for active business.

Russell Johnson Perrine, president of the New York Lumber Trade Association, and head of Johnson Brothers, Brooklyn, returned last week from a trip to the Panama canal zone. Like every one else who has made this trip Mr. Perrine was greatly impressed with the enormous proposition which the government is now hurrying to completion.

Fire on Apr. 1 damaged the stock of lumber and plant of the National Show Case Company, 486 Leonard street, Brooklyn.

The affairs of Collins, Lavery & Company, bankrupt, have been settled and the receiver discharged. The settlement comprehends the acceptance of extension notes in full for all claims. The business will be continued with Frederick W. Cole as president, and James L. Noble, vice-president. The creditors will be represented on the board of directors.

J. S. H. Clark Lumber Company, recently incorporated, have opened offices at 4 East Forty-Second street. The firm will conduct a general wholesale lumber business. The officers are J. S. H. Clark, president; W. G. Mennen, vice-president; F. M. McCracken, treasurer, and A. B. Clark, secretary.

BOSTON

George W. Butler, formerly with B. D. Peterson, Jr., Boston, has started in the commission lumber business for himself. He has opened an office in the State Mutual Life building.

B. D. Peterson, Jr., who for several years has conducted a lumber business in Boston, has been petitioned into involuntary bankruptcy. Mr. Peterson left Boston early in March and his present whereabouts are unknown.

The Cottage Lumber & Supply Company, Hartford, Conn., has been

incorporated with a capital stock of \$5,000. E. L. Nettleton is president and treasurer and Orin L. Nettleton, vice president.

Frank M. Fayer has purchased the lumber business in Gardner, formerly carried on by the late Milton M. Fayer.

The New Hampshire Lumbermen's Association held its annual meeting at Manchester, N. H., Mar. 20. Warren Tripp, who has been president since the association was organized, refused a renomination owing to poor health. The officers elected were: President, Irving H. Chase, Plymouth; vice-president, John H. Walker; treasurer, L. Ashton Thorp; directors, Samuel D. Felker, Governor of New Hampshire, James B. Tennant, J. B. Fellows, Frank B. Clark and Charles A. Bailey.

The West River Valley Lumbermen's Association held its annual meeting in Brattleboro, Vt., Mar. 19. The officers elected were: President, J. C. Tibbetts of Wardsboro, Vt.; vice-president, Frank H. Braser; secretary and treasurer, Willis H. Taft; executive committee, George D. Williams, C. H. Willard, F. H. Sanford, L. A. Cook and Julian Taft.

T. H. Shepard of the Shepard & Morse Lumber Company, Boston, has recently visited the company's plant in Burlington, Vt.

◀ PITTSBURGH ▶

The Pittsburgh Wholesale Lumber Dealers' Association recently elected J. L. Kendall of the Kendall Lumber Company, president; A. D. Knapp of the Nicola Lumber Company, vice-president; J. G. Criste of the Central Lumber Company, secretary and treasurer; Louis Germain, Jr., of the Germain Company; Edward Eller, O. H. Babcock of the Babcock Lumber Company, William H. Schuette of William Schuette & Co. and W. W. Dickey of the West Virginia Lumber Company, directors.

The Brown Brothers Lumber Company of Punxsutawney, Pa., will start work shortly to cut off a 7,000 acre tract of hardwood and hemlock near Murchison, N. C., which it bought two years ago. It will put in a modern band and resaw mill with capacity of 60,000 feet daily and expects to be busy eight years on this operation. The officials of the company, all of whom lived at Punxsutawney, are: President, W. F. Brown; vice-president, D. J. Brown; treasurer, P. L. Brown; secretary, G. C. Brown, director, S. A. Rinn.

The Pennsylvania Railroad Company has decided to build a big creosoting plant at Middletown, Pa. This is the result of a trip of its agent, Grant P. Shipley, to Europe to investigate creosoting methods there.

The plant of the R. B. McDanel Company at New Brighton, Pa., on the Ohio river, was practically ruined by the recent flood, the damage being estimated at \$15,000. The plant of the Kennedy Keg Company a little farther down the river was also considerably damaged.

The Adelman Lumber Company in its new offices in the Park building is doing a very nice business in hardwoods. A. Adelman, president, just escaped being washed out in the Ohio flood lately.

The Duquesne Lumber Company, which handles the product of the Pittsburgh Lumber Company, reports a part of the latter concern's railroad washed out near Bramer, Tenn., where its big plant is located. President A. Rex Flinn has gone down to oversee the repairs.

Frank E. Smith of C. E. Breitwieser & Co., is on a hardwood buying expedition in the South and expects to make some very desirable connections before he returns. This company's hardwood business is coming up right along and it looks for a fine trade all summer.

The Standard Box & Lumber Company's plants at Millvale, a short distance up the Allegheny river from Pittsburgh, were sold last week at public auction to Robert Ostermeier of this city for about \$29,000. The sale included the box factory which has been operating several years, considerable stock and the real estate.

J. J. Linehan, who represents exclusively the Mowbray & Robinson Company in this territory, has gone to Cincinnati to learn the extent of the flood damage to his firm there and also at its plants in Kentucky. Its hardwood trade, especially in oak and poplar, has been very satisfactory the past few weeks.

The plant of the Mack Axle Works in Beaver Falls, Pa., has been taken over personally by John Mack who was formerly a part owner, the consideration being \$75,000. Over 150 skilled men will be employed and a large sum will be spent on remodeling the plant.

The Foster Lumber Company has bought recently more timber in West Virginia and is now running a half dozen hardwood mills in tri-state territory. It has orders on hand to keep it busy for several months and is shipping a large amount of white oak especially.

The Shreve Chair Company, whose factory at Union City, Pa., was burned a few days ago, has let the contract for a new reinforced concrete plant three stories high and 86x400 feet. It is expected that the new plant will be ready for business by Aug. 1.

◀ BUFFALO ▶

President James A. White of the National Lumber Company has lately been in Chicago looking after the lumber vessels of the W. H. White Company, which are about ready for the sailing season.

G. Elias of G. Elias & Bro. has been making an eastern business trip in the interest of the firm. The office reports a good demand for hardwoods and excellent prospects for building here this spring.

B. E. Darling of Blakeslee, Perrin & Darling has been South lately, looking after lumber purchases. The yard of the company has a large quantity of plain oak coming in at present.

Hugh McLean has been a busy traveler as usual lately, looking after

the company's business in the East. The yard has a good assortment of oak and other hardwoods on hand.

Scatcherd & Son, who are among the pioneers in the use of mahogany, especially for inside finish, still find it quite an uncertain wood in the minds of architects, with the demand rather light at present.

F. M. Sullivan of T. Sullivan & Co., who has been looking after the hardwood trade pretty closely of late, is planning a trip to Atlantic City for a resting spell, although he states that the hardwood demand is good.

Anthony Miller's yard has been handling a good amount of incoming and outgoing lumber recently, demand being well distributed and including oak, ash and basswood.

The Emporium Lumber Company is still considering the fate of the Buffalo office, with a prospect of closing it altogether after a while. The extensive new offices in Utica will be ready for occupation on May 1.

The Buffalo Hardwood Lumber Company has a lot of lake lumber to come forward early this spring, much of it birch. More of this same wood will be handled from the Adirondacks this season.

Miller, Sturm & Miller have been getting in oak and ash lately, and report that the flooded situation in Ohio is causing a good deal of derangement to lumber movement from the South.

The Public Service Commission has ordered a reduction of rates charged in Buffalo for electricity, as well as gas. The reduction in power amounts to about thirty-three and one-third per cent. This will be of great advantage to this city in a commercial way. O. E. Yeager, who was formerly chairman of the electric light and power committee of the Chamber of Commerce, states that a number of large factories might have been secured for Buffalo within the past two or three years if the power rates had not been so high. He predicts that the reduction will be very stimulating to Buffalo's prosperity.

John W. Welch is here from Memphis, where he located some time ago as a member of the hardwood firm of Welch Brothers. He states, however, that he will go back to British Columbia about August to resume regular operations there.

Jackson & Tindle are moving this month to the New York Telephone building, which will be their headquarters in future. The yard on Niagara street has been given up, owing to the location having been outgrown. It is expected that a more roomy yard will be purchased later.

◀ PHILADELPHIA ▶

Samuel H. Shearer of Samuel H. Shearer & Son says things are moving satisfactorily, with signs potent for ample future trading. William P. Shearer is in Atkinson, N. C., superintending the erection of a planing mill for the firm, which will manufacture sidings, roofers, factory flooring, etc. The plant will have a capacity of about 30,000 feet a day.

Schofield Brothers at the end of their fiscal year on Mar. 31 testify to a remarkably prolific year's business. Robert W. and John H. Schofield are in Schofield, S. C., to attend the annual meeting of the Saltkeatchie Lumber Company, which is controlled by this prominent Philadelphia house.

The Haddock-France Lumber Company, Mt. Sterling, N. C., is rushed to full capacity, and at the present time is turning out some extra fine stuff. Howard B. France, secretary and treasurer of the Haddock-France Lumber Company and the Monarch Lumber Company, which is the sales end, reports a brisk activity, with outlook stimulating. Demand for low grades far exceeds the supply.

W. S. W. Kirby of the Kirby & Hawkins Company says everything is running without a hitch. They are so busy on railroad supplies and overhead material, they can hardly find time for the general lumber business.

J. S. Maris of the Maris & De Witt Lumber Company complains only of the difficulty of getting the desired material. The company is able to sell almost anything at this time without the least exertion.

Ralph Souder of Hallowell & Souder says they have no fault to find with business. Orders are coming in freely—which requires a lively hustle these days to keep the supply up to the demand. They have added another office and now occupy the whole southern side of the Harrison building.

Arthur W. Kent, secretary and treasurer of the J. S. Kent Company, admits a little concession in some lines, but on the whole prices are well sustained. J. E. Troth, president of the company, is taking a much deserved recreation, with his family, in the shape of a month's trip to Bermuda.

Among the recent visitors to the Lumbermen's Exchange and the trade, were F. R. Stevens of the Robert Dollar Company, San Francisco, Cal., and Jacob Eisenberger, superintendent of the Penn Sumter Lumber Company, Sumter, S. C.

Norman A. Perry, manager of Robert C. Lippincott, reports accelerated business. The placing of orders is now the easiest part of the business, but stocks are still scarce and difficult to secure.

The Woodlawn Lumber Company, Woodlawn, Pa., was chartered under Pennsylvania laws, Mar. 27, with a capital of \$50,000.

The Philadelphia-Vancouver Timber Company, Wilmington, Del., obtained a charter under Delaware laws, Mar. 29, capitalized at \$60,000.

The Red Lion Table Company, Red Lion, Pa., was incorporated under Pennsylvania laws, Mar. 31, with a capital of \$50,000, by George M. Holtzinger.

◀ BALTIMORE ▶

The Reinl-Salmon Company, manufacturer of show cases and store fixtures, has obtained a permit for the addition of two stories to the factory building at Stockholm and Warner streets, which will make the building four stories. The structure covers a lot 112 by 40 feet. The cost of the improvement is estimated at \$6,000.

F. X. Ganter, another show case and office fixture maker, is erecting two warehouses in connection with his plant at Leadenhall and Stockholm streets, the demand for the firm's product having outgrown the capacity of the plant.

Still another improvement is the proposed erection of a five-story fire-proof building as an addition to its factory by the furniture manufacturing firm of Levenson & Zenitz, 3 North Gay street. The firm has been recently incorporated as Lenson, Levenson & Zenitz, Inc. The projected structure will front 100 feet on Frederick street, running back on Fayette street 165 feet to Gay, where it will have a front of 92 feet. The machinery to be installed will be of the latest pattern, and the cost of the improvement is estimated at \$250,000.

The litigation over 50,000 acres of timber and coal lands in McDowell county, W. Va., carried on by the late Max Lansburg of Baltimore, has been revived by his son, Max Lansburg, Jr., who sues as administrator of his father's estate and seeks to recover the land, in which aim his father was unsuccessful. The suit is against Henry B. McCormick, the W. M. Ritter Lumber Company, the Pocahontas Coal & Coke Company and others, the Ritter company and the Pocahontas company having the timber and coal rights on a large portion of the property, which is valued at more than \$5,000,000. The proceeding is in progress in the United States court at Charleston, W. Va. The father of the plaintiff once owned the tract in question, but it was sold to satisfy a judgment, contrary, it is alleged, to the Federal statutes. The administrator seeks to have the former judgment set aside and is endeavoring to obtain possession of the property through a tax sale.

R. E. Wood, president of the R. E. Wood Lumber Company, has just concluded the purchase of a tract of timberland at Earhardt station, on the Virginia & Southwestern Railway, south of Bristol, Tenn., in Sullivan county, Tenn. The tract includes about 2,000 acres, and for about two years will suffice to run a pony band mill to be erected there.

David T. Carter of David T. Carter & Co., returned last Monday from a trip to southwestern Virginia and eastern Tennessee, the trip being undertaken mainly in search of suitable hardwood stocks. Mr. Carter was able to get only about two-thirds of the lumber he wanted, finding that the mills are out of stock and that prices are uncertain and high. Everywhere he heard the same story of selections having been absorbed by the demand and of the output of the mills falling behind the requirements of the market.

For the quicker detection of forest fires in the Blue Ridge mountains of Maryland the state will erect on High Knob, south of Quirauk, near Pen-Mar, a steel tower thirty feet high. The fire wardens are to pass the tower every day and take observations. From the tower they will be able to command a view over a wide stretch of mountain land, and detect any incipient fires that may have broken out.

E. E. Price of the Thomas Hughes Company, Keyser building, was on a trip to Pennsylvania last week, looking up buyers and stocks as well. He found buyers plentiful enough, with stocks by no means in liberal supply. In fact, lumber proved hard to get.

◀ COLUMBUS ▶

The principal event in hardwood circles in Columbus and central Ohio during the past fortnight was the unprecedented floods which swept the country. Waters in the Scioto, Olentangy, Miami, Mad and Muskingum rivers were higher than ever before and other streams were in about the same condition. As a result the hardwood trade was completely paralyzed and little was done.

Railroad transportation from all sections was cut off for days and traffic will not be normal for weeks and even months because of the large number of railroad bridges washed away. Mail was delayed and business of every kind was at a standstill.

One of the effects of the flood was the demand for timbers for temporary railroad construction and all yards located near railroads were sold out in short order when the waters subsided. The destruction of hundreds of frame houses in the West Side—the flooded district—will also mean a large market for lumber when the time comes for rebuilding.

A large number of retail and wholesale hardwood concerns in Columbus were badly damaged by the high waters. Among the number was The Doddington Company at 447 West Broad street. The company's plant was flooded and thousands of feet of lumber were lost in the current. The concern has established temporary offices in Room 207 Central National Bank building and business is going on about as usual. The West Side Lumber Company, West Broad street and the Big Four tracks, which also sustained some loss, is filling orders of the Doddington Company.

The M. J. Bergin Lumber Company, West Spring street and Dennison avenue, also sustained a heavy loss because of the high waters which wrecked sheds and drifted lumber away.

The Whitacre Lumber Company, 451 West Broad street, was also a

heavy loser from the flood. The yard, located at McDowell street was flooded and the loss is estimated at \$6,000.

The Buttle Avenue Lumber Company was a heavy loser as its yards were completely submerged. The loss will amount to thousands of dollars.

The Acorn Lumber Company, West Rich street, is another of the concerns which sustained a heavy loss. It is believed the damages will amount to close onto \$10,000.

Cones & Menefee, 450 West Broad street, was probably the heaviest sufferer from the floods. The plant, located right in the heart of the flooded district, was almost completely destroyed and the larger part of the lumber, amounting to hundreds of thousands of feet, was swept away.

The Columbus Lumber Company, on West Spring street, is one of the heaviest losers from the flood. Thousands of feet of lumber was lost and some of the sheds were destroyed.

R. W. Horton, sales manager for the central division of the W. M. Ritter Lumber Company, says trade was at a standstill during the flood, but since it is over there is a rush of orders from retailers who sold out their stock to railroads for construction work. Factories are also in the market for stocks. The high waters did not affect the mill district of the company located in the South.

L. B. Schneider, sales manager of John R. Gobey & Co., says there is a good demand for hardwoods and prices are firm. This concern looks for a good trade from this time on.

F. Everson Powell of the Powell Lumber Company says trade is as good as could be expected under the conditions with prices ruling firm.

◀ TOLEDO ▶

The Gotshall Manufacturing Company has purchased a supply of new machinery for its mill at Archbold, O. The shipments were held up en route because of the flood but sustained no injury.

One of the remarkable incidents of the Dayton flood is to be noted in the fact that "The Log Cabin," the first house constructed in Dayton, on the south bank of the Miami right in the path of the flood where the full force of the waters struck it, is still standing. This is the more remarkable when it is remembered that many brick and concrete residences were carried away or demolished.

Orders have been coming in very freely to the Booth Column Company, but great difficulty has been experienced by this concern in getting shipments under way and there has been considerable delay and congestion at the plant on this account. The railroads with one or two exceptions for practically a week refused all freight shipments through flooded territory. Shipments were begun Friday of last week, however, and it is hoped within a few days to have caught up and have things running smoothly again.

One of the heavy losers in the Ohio floods was the Turnbull Wagon Company, which operates a plant at Defiance. This is one of the oldest industries in that city and was largely instrumental in building up the eastern part of the town. It is situated on the banks of the Maumee river and lost heavily from the inundation of shops, causing injury to machinery as well as carrying away large quantities of lumber. In addition to manufacturing wagons, the concern manufactures automobile wheels. The loss is estimated at practically \$100,000. The regular employees of the factory have been busy ever since the flood trying to clean up the plant. It is not known just how soon it will be ready for operation. This is largely a Toledo owned corporation.

The J. M. Skinner Bending Company reports orders as coming in with more than ordinary rapidity and the factory is busy trying to keep up. This concern escaped all water damage.

The Bryan Show Case works of Bryan, O., which was destroyed by fire some time ago, is being rebuilt. The new building will be a two-story brick structure 175x50 feet and will have a one-story 100-foot brick ell. There will be 16,000 feet of floor space.

"We have more orders than we can well attend to," was the report from the Toledo Bending Company. "Our one difficulty has been found in the refusal of railroads to receive freight for shipment for several days. The roads are now all in good shape, however, and the congestion has been relieved. We look for a big season."

◀ INDIANAPOLIS ▶

The Chicago Veneered Door Company of Illinois has been certified by the secretary of state to do business in Indiana. Of its \$25,000 capital \$20,000 will be represented in Indiana.

The Schoentrop-Worden Rack Company's plant at Shelbyville was destroyed by fire with a loss of \$8,000, after the company, which manufactures clothes racks, had been in business three weeks.

Edwin R. Hamilton, for many years in business at Martinsville, died at the home of his daughter in this city recently. He was seventy years old, and is survived by three children. The body was taken to Martinsville for burial.

Building permits issued by the city during March amounted to \$754,305 as compared with \$558,780 in March, 1912.

Two carloads of mahogany logs valued at \$10,000 were washed away by the flood at Lawrenceburg, Ind., a few days ago. They had been consigned to Lawrenceburg veneer mills.

About \$10,000 loss was caused by fire at the furniture plant of the Cabinet Makers Union in this city on the night of April 4. The fire

started in shavings in the boiler house. This was the third serious fire at the plant, which was established in 1862.

Hardwood concerns were not in the path of the flood which swept over the city Mar. 25, although several other lumber companies suffered losses. Boats for the rescue of flood victims were built at the plants of the Balke & Krauss Company and the main plant of the Capitol Lumber Company. Lumbermen have donated liberally to the relief fund, among the number being the Balke & Krauss Company, the Interior Hardwood Company, and the Long-Knight Lumber Company, also E. C. Atkins & Co., manufacturers of saws.

MEMPHIS

The Valley Log Loading Company, which operates a log loading plant on the Yazoo & Mississippi Valley line of the Illinois Central System, has been doing everything in its power during the past few days to move the timber placed on the right of way of that railroad. During March it loaded about 1,500 cars for Memphis and other points. It would have been able to deliver more but for the inability of the railroads to furnish the necessary equipment and motive power. The company has been besieged with requests for prompt loading of timber during the past few days because a great deal of this will be overflowed if it is not brought out within the next week. The Yazoo & Mississippi Valley is subject to more or less interruption from the high water and the present indicated stage suggests that after next week it will be impossible to make any headway with logging work for some time. It also suggests the possibility that any timber left in the low lands along that line may be subject to overflow as was the case last year.

Albert N. Thompson & Co. are preparing to erect a mill near Yazoo City, Miss., for the development of the timber on a cypress brake owned near there. This firm has been engaged in the wholesale handling of hardwood lumber here for a number of years. The mill will not be of very large capacity, but it will be a band one and the output will be of the best character. In addition to its general business the firm will market the output of this mill.

W. A. Stark of the W. A. Stark Lumber Company is preparing to erect a mill at Bledsoe, Ark. It is to be a band plant and will have a capacity of about 30,000 feet per day. Mr. Stark has acquired a considerable amount of timber in that immediate section and the new mill will be installed for the development thereof. Mr. Stark was for a number of years associated with his brother, James E. Stark, in the wholesale hardwood lumber business. Later he conducted a wholesale business under the firm name of W. A. Stark Lumber Company. He has been anxious for some time to own and operate a mill and has at last found what he desired in that particular field.

The Grismore-Hyman Company has made application for a charter under the laws of Tennessee. Its headquarters will be at Memphis and its capital stock is placed at \$50,000. Among the incorporators are: F. Grismore, H. W. Hyman and Ray Ulrey, all of whom have been prominently identified with the cooerage trade of this city and section for a number of years. The company will manufacture staves, lumber and other allied products.

The Blytheville Cooerage Company has been chartered at Blytheville, Ark. It is capitalized at \$15,000 and is engaged in the handling of staves, timber and other products. F. P. Carter, T. Slagle and others are the incorporators.

The John Dulweber Company of Cincinnati has broken ground for the establishment of a hardwood mill at Moorehead, Miss. The new plant is to be in operation within the next sixty or ninety days.

The Shelby Cooerage Company, Portland, Ark., has completed arrangements whereby its plant is to be removed from that point to Helena, Ark. This company gives employment to about one hundred men and will be a substantial addition to the manufacturing enterprises of Helena.

E. P. Costello, chief clerk of the office of R. M. Dozier, commercial agent of the Iron Mountain System, is successor to W. M. Taylor, as chief clerk of the Memphis Freight Bureau. Mr. Taylor has gone to Pine Bluff to accept the management of the recently organized freight bureau at that point. The lumbermen of Memphis have been prominently identified with the Memphis Freight Bureau for a number of years and that organization has been of substantial aid to them in the handling of rate problems undertaken by the Lumbermen's Club of Memphis, the old Memphis Hardwood Rate Association, the old Memphis Lumbermen's Traffic Bureau and the present Southern Hardwood Traffic Bureau.

A. H. Egan has already entered upon his duties as general superintendent of the Yazoo & Mississippi Valley Railroad, with offices in Memphis. He succeeds G. W. Berry, who recently resigned and was appointed superintendent of terminals at Chicago. Mr. Berry was quite popular with the lumbermen and the latter have expressed much regret that his wife found it impossible to live in the South, thus making his transfer necessary. Mr. Egan has been extended a very warm welcome by the lumber fraternity as well as by other business interests here.

Russe & Burgess, Inc., have ordered a new mill which is to be delivered within the next sixty days. It is to be equipped with a nine-foot band saw, with shot gun feed, and is also to have a seven-foot Mershon band re-saw. The Allis-Chalmers Company has secured the contract. The firm will begin tearing down its present mill about the first of May and it ought to have the new plant installed and in readiness for operation by Sept. 1. The new mill will have a capacity of 40,000

to 45,000 feet. The present mill is cutting at the rate of about 25,000 to 30,000 feet. The old mill will be completely dismantled and sold. This firm has been engaged in the manufacture of hardwood lumber at Memphis for a number of years and makes a specialty of export business. In fact it maintains an office in London for the handling of its foreign trade. This is in charge of G. A. Farber, who is a member of the firm.

A slight increase is shown in building operations at Memphis for March. The total valuation was \$573,321, against \$499,366 last year, an increase of approximately \$75,000. The outlook is considered good for April. It is not anticipated that the high water will have any effect upon building operations here, although it is likely to decrease activity outside of this city, particularly in the Mississippi valley.

Bank clearings for March broke all previous records in the history of this city for that particular month. There was an increase of approximately \$2,000,000 over the same period last year. The total was \$34,553,173.97. The cotton market during March was not particularly active and the excellence of the showing with respect to bank clearings is due in considerable measure to the good trade enjoyed in some other lines. The lumbermen made a most substantial contribution. They had a better business during March than they have had for several years at this particular time and, but for the flood outlook, the situation would be quite bright from their standpoint.

The Illinois Central and Yazoo & Mississippi Valley roads have advised the Southern Hardwood Traffic Bureau that they will comply with the decision of the Interstate Commerce Commission in the recent transit case and issue tariffs, to become effective about May 1. These will provide a refund on inbound movements of logs to Memphis upon shipment out of lumber, without reference to the kind of logs received or the sort of lumber shipped. This means that it will not be necessary for the lumber manufacturers here to ship gum lumber out of Memphis in order to secure the refund on gum logs shipped to this point. The requirement heretofore has been that the particular kind of lumber designated by the logs had to be shipped in order to release the refund on the logs and this resulted in tying up the funds of lumbermen for an indefinite period. The decision of the companies to handle the matter as already indicated will result in facilitating the refunds and will prove of very great assistance to the lumbermen operating at this point.

NASHVILLE

Additional supplies of logs will be brought down the Cumberland as a result of the high tides. Logging operations in the upper river section have been fairly active and many millions of feet have come to this market.

Unfavorable weather during the recent storm period held back local building operations considerably, but the past several days have been good and spring-like and, with the advent of warm weather, great activity along building lines is confidently anticipated. Reports indicate that this will be a great year in building here, some predicting that 1913 will break all former records. Building statistics for the past month show that Nashville held the lead in the gain for building operations. Reports show that during 1913 there were 1,463 building permits issued here outside of those for minor repairs, the total cost of the work being \$1,388,997. August held the record for the greatest number during the year and December had the record for the smallest number.

Charles E. Hunt, one of the prominent local members of the trade, is recovering from a recent attack of appendicitis.

Several insurance bills of interest to the lumber trade are pending before the Tennessee legislature. One forbids any company doing business in the state except through a resident state agent.

Comparatively little damage was done hereabouts by the recent general storms and floods. All the streams are all out of their banks and this fact has necessarily handicapped for the time being those plants which occupy low lands along the rivers and also makes hauling difficult on the country roads; a considerable amount of standing timber was blown down in spots; but leading local lumbermen say the losses will not be heavy or general. Considering the severity of the storms, the losses are reported remarkably light to the timber and lumber interests of this section.

The Nashville Pattern Works with J. D. Tipple of Youngstown, O., as proprietor and manager, will establish a plant here for making wood patterns for all kinds of castings. Many skilled workmen will be brought here from Youngstown to be employed in the new factory.

The Memphis Freight Bureau has filed a complaint with the Tennessee Railroad Commission here regarding rates on forest products to Memphis from stations on the line of the Nashville, Chattanooga & St. Louis Railway. The claim is that a discrimination is being made against Memphis compared with other Southern cities on the same line for equal distances. The commission here has taken the matter up with the railroad authorities.

F. G. Ewing's sawmill at Adams was destroyed by fire on Apr. 1, the loss being about \$2,000. The fire is supposed to have started from the engine.

LOUISVILLE

The Ohio river, not content with the damage caused in January, where the lumber interests of the valley were subject to inconvenience and loss equaling the flood of 1907, came through with another which in the

volume of water piled up and the extent of the damage wrought, was surpassed but slightly by the record flood of 1884. Lumbermen cannot remember having had to contend with two floods in one year, and consequently the second trouble of this kind coming in 1913 seemed to vindicate the ill omen of the date. The river's rise was rapid as the waters of the swollen streams of Ohio and Indiana as well as those of Kentucky poured into the overburdened channel. The Point was flooded again, and many industries along Beargrass creek were put out of commission by the backwaters of the river. Though the river is now rapidly receding and will be at normal stage in a few days, much remains to be done before the situation can be pronounced normal. Lumber concerns at Maysville and Paducah on the Ohio river, Hickman on the Mississippi, and at many points on the Kentucky river, were damaged by the flood, which invaded plants supposed to be immune. As the result of the widespread devastation, greater attention is now being given to plans for building a dike around the Point in Louisville, and the municipal authorities are arranging for a survey of the situation to be made by Federal engineers.

The worst feature of the situation, from the standpoint of lumbermen not directly affected by the flood, was the paralysis of mail and freight services. The former was the first to recover, though much Chicago, Indianapolis and other northern mail arrived in Louisville ten days overdue. Freight traffic was completely demoralized, and even now few of the roads are able to handle cars with any satisfaction to themselves or their customers. The prospect is for a great tie-up of freight throughout the Middle West, as shippers from all sections are now pushing overdue consignments into that territory, where the railroads are utterly unable to cope with the situation. They have put embargoes on as much as possible, but the moment one is lifted a veritable flood of freight pours in. Hence lumbermen may expect to worry chiefly with this phase of the situation during the next few weeks.

The Louisville Hardwood Club has arranged to resume the series of business papers which were such a pleasant feature of its work last year. Assignments were made by firms, and two representatives of each concern will make talks. G. D. Crain, Jr., secretary of the club, started the series Apr. 8, and the following will appear on the dates named: D. E. Kline, Louisville Veneer Mills, Apr. 15; C. M. Sears, Edward L. Davis Lumber Company, Apr. 22; T. M. Brown, W. P. Brown & Sons Lumber Company, Apr. 29; A. E. Norman, Norman Lumber Company, May 6; Stuart R. Cecil, Booker-Cecil Company, May 13; P. G. Booker, Booker-Cecil Company, May 20; R. F. Smith, Ohio River Saw Mill Company, May 27; Berry Norman, Norman Lumber Company, Jun. 3; Edward S. Shippen, Louisville Point Lumber Company, Jun. 10; H. E. Kline, Louisville Veneer Mills, Jun. 17; Edward L. Davis, Edw. L. Davis Lumber Company, Jun. 24; Ohio River Saw Mill Company, Jul. 1; W. P. Brown & Sons Lumber Company, Jul. 8, and Smith Milton, Louisville Point Lumber Company, Jul. 15.

P. G. Booker has been elected president of the Booker-Cecil Company, which was recently incorporated with \$50,000 capital stock. John Churchill is vice-president and Stuart R. Cecil secretary and treasurer.

W. V. Shephardson, secretary and treasurer of the Anderson Veneer & Saw Mill Company, recently resigned in order to take up the study of osteopathy. He was succeeded by August Kahler, who has been with the company for some time.

A state forestry association will be formed in Louisville during the meeting of the Kentucky Educational Association, which meets Apr. 30.

Local hardwood men are much interested in the announcement that printed copies of the proposed amendments of the rules of the National Hardwood Lumber Association will be issued shortly, so as to enable them to be considered prior to the annual meeting of the association in Chicago. The amendments will be thoroughly discussed in advance of the meeting, so as to enable them to be disposed of at the convention with a minimum amount of trouble.

The Chesapeake & Ohio has contracted for the immediate construction of its 22-mile extension up Beaver creek, and work on it will be begun at once. The cost of the extension will total \$300,000. It will open up an important section of timber country which at present is not equipped with transportation facilities.

Louisville lumbermen are taking a prominent part in the work of the commercial club, which, with the co-operation of other organizations, is raising a fund of \$500,000 for the purpose of assisting new industries to start here. The plan is to take stock in deserving enterprises, this stock to be retired as the companies get on their feet financially.

The American Creosoting Company, which has offices in Louisville, has let contracts for the equipment of two new plants which it is building, one at Indianapolis and the other in Canada. The Louisville & Nashville has also let contracts for the equipment of its \$40,000 creosoting station at Guthrie, Ky.

ST. LOUIS

The receipts of lumber by rail at this center, during the month of March this year, as reported by the St. Louis Merchants Exchange, were 11,746 cars. During March last year the receipts were 13,769 cars, thus showing a loss in receipts this March of 2,023 cars. This falling off was due to the weather conditions. Shipments of lumber by rail last month were 12,650 cars while a year ago the shipments were 9,879 cars, a gain over the corresponding month last year of 2,771 cars.

There were no receipts or shipments made by river either this year or last.

F. H. Smith, president of the Lumbermen's Exchange of St. Louis and also president of the Smith-Sueme Lumber Company, was the principal speaker at the monthly banquet and business meeting of the St. Louis Furniture Board of Trade, held a couple of weeks ago. The topic of his talks was Lumber Inspection.

The most radical measure ever introduced in the Lumbermen's Exchange was adopted at its last meeting. This was the enlargement of the character and scope of the exchange by making it the nucleus of a national inspection organization for concerns not affiliated with the Yellow Pine Manufacturers' Association, by taking into the organization and giving them the benefit of inspection, a number of wholesale yellow pine concerns who were excluded from membership in the Yellow Pine Manufacturers' Association recently. The idea was conceived by President Smith of the exchange. A committee is at work formulating plans, which will be announced later. Already a number of out-of-town yellow pine wholesalers and hardwood manufacturers have joined or have signified their intention to do so at the proper time. It is the intention of the exchange to furnish these firms with an inspector, not only in St. Louis, but an inspector who will be subject to their requests to do out-of-town work.

The inspector of the Lumbermen's Exchange, E. L. Watkins, whose family still resides in Anderson, Ind., received a wire from them a few days ago that the household effects which had been packed, preparatory to being moved to St. Louis, where Mr. Watkins intends to reside in the future, had all been swept away by the flood. He is now over there looking after them.

Advices have been received here that the Interstate Commerce Commission has further suspended advances in hardwood rates from Memphis to New Orleans until Sept. 30.

R. F. Krebs of the Krebs-Scheve Lumber Company and Miss Gertrude Nepper were married here on Mar. 29. They will be at home after Apr. 14.

President T. C. Whitmarsh of the Lumbermen's Club has named W. E. Grayson, president of the Grayson-McLeod Lumber Company, as vice-chairman of the traffic committee of the club to assist Thos. E. Powe of the Thos. E. Powe Lumber Company in his duties. These two gentlemen, with E. E. Eversull, traffic manager of the W. T. Ferguson Lumber Company, and George Reeves, traffic manager of the Chicago Lumber & Coal Company, two well known traffic experts, as the two other members of the committee. These appointments were made because the traffic matters of the club are growing since this has been made one of the features of the organization and it promises to grow more in importance before the year ends. All traffic matters which may come before the club from time to time will be handled by this committee. The personnel of the committee is a very strong one, probably the strongest on traffic matters of any lumber club in the country.

The lumber fraternity of this city did their share in subscribing to the Ohio and Indiana flood fund. The Lumbermen's Club and the Lumber Dealers' Association joined forces and sent out an appeal to their members who responded liberally and quickly. The committees were made up of J. A. Rebeis, Julius Seidel and Stephen H. Gavin of the Lumber Dealers' Association, and W. E. Barns, C. M. Jennings and T. C. Whitmarsh of the Lumbermen's Club. The subscriptions amounted to nearly \$700, in spite of the fact that many of the members of the two organizations sent in subscriptions direct to the Red Cross Society before the joint appeal was received. The Lumbermen's Exchange did likewise and responses came in quickly from them.

MILWAUKEE

The Burdick Cabinet Company, recently noted as having incorporated with a capital stock of \$150,000 at Milton, has purchased a factory site and building operations will begin at once. At a recent stockholders' meeting, the following directors were elected: Fred F. Burdick, president; Dr. A. S. Maxson, vice-president; Allan B. West, secretary; B. H. Wells, treasurer; Dr. G. E. Crosby and George W. Coon.

Among the new manufacturing plants to begin operations in Tomahawk during the past two weeks is the Tomahawk Stave and Heading Company. The plant has been equipped and work has been started.

An annex 108 feet long and 64 feet wide has been completed at the plant of the Marinette & Menominee Box Company, at Marinette. It has been equipped with three bolting machines and a sawdust and bark conveyor. Twenty additional men are given employment in the new department of the factory.

The Haslam Lake Timber and Logging Company has been incorporated at Janesville, with a capital stock of \$300,000. O. E. Oestreich, L. A. Avery and L. Westlake are named as incorporators. The same principals have also incorporated the Gordon-Pasha Timber Company of Janesville, with a capital stock of \$100,000.

An amendment of the incorporation articles of the Oscar A. Anderson Lumber Company of Janesville, has been filed. The capital stock is increased from \$30,000 to \$50,000.

The Superior Lumber Company has been incorporated at Superior by Harris W. Erlanson, C. L. Erlanson, G. M. McFarlin and Eva G. Erlanson. The capital stock of the concern is placed at \$10,000.

The Bradley Estate Company has been incorporated with a capital stock of \$25,000, divided in 250 shares of \$100 each. Miss Alice Bradley,

Edna Bradley, daughters of the late Edward Bradley, pioneer lumberman, and Spencer Hilsley are the incorporators.

With newly acquired timber holdings, on which are about 600,000,000 feet of standing timber, which were turned over on Apr. 1, the Hines Lumber Company will soon start its sawmill at Park Falls. About 1,500 men will be employed at the mill and in the woods, and with a 10-hour day run, the mill will saw between 175,000 and 200,000 feet daily. The present intention is to run steadily on day shifts and during eleven months of the year. The timber will furnish a ten years' supply.

The J. W. Wells Lumber Company has acquired ten forties of timberland on the Wisconsin Northern railway from the Sawyer-Goodman Company of Marinette through a deal whereby the latter concern secures scattered timber in the vicinity of Goodman. The Wells company will lay about two miles of spur track into the newly acquired timber and log it during the coming summer, according to Superintendent W. E. Hallenbeck.

The Van's Harbor Land and Lumber Company of Van's Harbor, Mich.,

has closed a deal whereby it comes into possession of a large tract of timbered land in Iron county, Wis. The deal was consummated through the Grimmer Land Company of Marinette for lower Michigan parties. The Van's Harbor company will move its mill from Van's Harbor to Iron county this year.

The Roddis Lumber & Veneer Company of Marshfield has increased its timberland holdings by 2,862 acres of timberland in Iron county. The company now has 28,000 acres in Ashland and Iron counties which will supply raw material for many years. The timber suitable for veneer is shipped to the Marshfield factory, while the remainder is sent to Park Falls to be sawed into lumber.

The Keith & Hiles Lumber Company of Crandon has closed a deal with the Chicago & Northwestern railway for the purchase of 3,000 acres of fine hardwood timberland, lying south of Crandon and close to their logging railway. This makes a total of 6,000 acres acquired during the year.

Charles F. Kade, general manager and vice-president of the M. Winter Lumber Company of Sheboygan, has resigned. He disposed of his stock early last summer and at that time resigned, although the resignation did not take effect until the last of March. Mr. Kade has been with the company for sixteen years and will take a much needed rest before entering some other business.

The Peshtigo Lumber Company, Peshtigo, Wis., will in a few days open its new, modern sawmill, equipped with the best machinery, which replaces the one destroyed last year. With the exception of the carriage and "nigger" and the band re-saw, all machinery is ready and connected up. The shingle and tie mill, to be operated with the sawmill, is nearing completion, and the filing room is almost ready. The new brick power house is a 52 by 60 foot structure, with a fuel room 22 feet square and a pump room 16 by 24 feet. A 130 foot smoke stack is being completed, and other equipment ready to start.

The State Railway Commission is investigating the complaint of lumbermen of the state against the advance in the cost of transporting logs. The commodity rates, for handling lumber products, in effect when the railway commission law went into effect eight years ago, were for the most part on logs which were to be manufactured into lumber or some other products and shipped again in the manufactured form. These rates involved discrimination which the new law expressly forbade, and the readjustment made the rates uniform and common although not up to the plane of other rates. Now that the railways have been advancing these log-handling rates, more nearly to the level of other traffic, the lumbermen have complained. It is possible that the commission may advance them still further.

Lyman Oliver Rumery, a resident of Oshkosh since 1854 and one of the last of the lumbermen of the old school, has passed away at his home in that city, aged nearly eighty-six years. Mr. Rumery was a native of Maine and came to this state nearly sixty years ago with his wife, since deceased. He was one of the first to engage in the logging business, a part of the time with others and at times independently. He is survived by two sons and five daughters: J. P. Rumery of Chicago; L. O. Rumery, Jr., Miss Carrie Rumery, Mrs. Charles A. Wakeman, all of Oshkosh; Mrs. J. Howard Clement and Mrs. Francis S. Underwood, both of Milwaukee, and Mrs. Lewis H. Gunnell of Arlington, N. J.

◀ DETROIT ▶

The Thomas Forman Company reports that business is continuing along the same lines and that the mill force is working full time. "Our supply of rough material is getting low due to the floods of a year ago," said a representative of the firm. "The crippled condition of the railroads in Ohio and Kentucky is by no means a pleasing situation for us. While we have a fairly good supply of dressed lumber on hand, it is feared that with the spring rush we will be too handicapped to supply the trade as readily as we would like to."

Mr. Forman is on his way to the company's mills in Heidelberg, Ky., to rush the rough material to Detroit as speedily as possible. The high wind of last week caused some damage to the company's plant, not only to the lumber piles but to the mill as well. A part of the roof of the mill was blown off and some stock was damaged.

George I. McClure reports that business is brisk in all lines of hardwood and that prices are high and firm. Mr. McClure says that the auto body companies are starting to buy more freely, after a lull of about three months. The furniture factories are also placing nice-sized orders for immediate delivery. Business in the building trade is increasing every day.

On account of the increase in the building trade Geo. I. McClure is building a new warehouse 100x40 feet, thereby increasing facilities for carrying more stock. The M. C. R. R. will next week lay another track into the yard. All tracks are 600 feet long and paved for teaming.

E. W. Leech reports that business is a little quiet in the hardwood line and that stock is a little scarce. Prices on all materials are reported firm. "We have done more business this winter than we did last and prospects for an early spring rush are very good," says Manager Smith. "The auto body companies and the furniture factories are ordering freely for immediate delivery and the box companies are beginning to show signs of renewed activity. There is a good demand for crating lumber from this source. Building permits issued this winter are largely in excess of last winter and I look for a big business in in-

WANTED

All Kinds of High-Grade

HARDWOODS

S. E. SLAYMAKER & CO.

Representing
WEST VIRGINIA SPRUCE LUMBER CO., Fifth Avenue Building,
Cass, West Virginia. NEW YORK

CINCINNATI

Hardwood Manufacturers and Jobbers

CHARLES F. SHIELDS & CO.

SPECIALISTS IN WIDE STOCK
POPLAR, OAK, CHERRY, BIRCH

GEORGE LITTLEFORD

RED CEDAR, CHERRY
OFFICE: 1263 RICHMOND STREET

SWANN-DAY LUMBER CO.

Mfrs. YELLOW POPLAR and WHITE OAK
SALES OFFICE—SECOND NATIONAL BANK BUILDING

SHAWNEE LUMBER CO.

HARDWOODS, WHITE PINE and HEMLOCK
Sales Office—South Side Station—C. H. & D. R. R.

RIEMEIER LUMBER CO.

OAK, POPLAR, CHESTNUT
SUMMERS AND GEST STREETS

JAMES KENNEDY & CO., Ltd.

OAK, POPLAR AND OTHER HARDWOODS
FIRST NATIONAL BANK BUILDING

The Kosse, Shoe & Schleyer Co.

WALNUT, OAK, AND OTHER HARDWOODS
103-4-5 CAREW BUILDING

OHIO VENEER COMPANY

Manufacturers & Importers FOREIGN VENEERS
2624-34 COLERAIN AVENUE

terior finish within another week. Like all other hardwood men we are eagerly awaiting the opening of navigation to replenish our stocks as the difference in freight rates by boat and rail is no small matter."

R. J. Clark, president of the Peninsula Park & Lumber Company of Saulte Ste. Marie, Mich., was in Detroit the past week on business.

A. E. D. Allan of the firm of Allan Brothers who is ill with inflammatory rheumatism and who went to St. Petersburg, Fla., a couple of weeks ago is slowly regaining his health, according to letters received by his brother, Bert Allan. Mr. Allan has been ill for several weeks and because of his condition his southern trip was delayed some time.

Bert Allan of Allan Brothers reports that, because of the floods in Ohio, Indiana, Kentucky and other southern points, shipments of hardwood lumber from the South have been seriously hampered.

Albert B. Lowrie and Fred J. Robinson of the Lowrie & Robinson Lumber Company, have just returned from a vacation spent in Los Angeles, Cal.

John J. Comerford of the Detroit Lumber Company has returned from a trip to Panama where he spent several weeks.

Mr. Clancy of the Thornton-Clancy Lumber Company of Chicago, was a visitor last week.

The Hardwood Market

< CHICAGO >

Considerable anxiety is being experienced by members of the local trade in the matter of making deliveries on southern stock originating in the flooded territory. Quite a quantity of lumber was shipped from distributing centers along the Ohio before the floods actually reached there, in anticipation of high waters. This stock was loaded hurriedly and was practically dumped onto the market in more or less of a chaotic condition. There was not enough of it to effect any very marked change in market conditions, but several shrewd purchasers were willing to take a chance and realized very handsomely on it.

The spring season is evidently here to stay, although there is still a little chilliness in the air. Still definite arrangements are being made locally for the active opening up of the building season. Any complaint that comes regarding the laxity of business from any quarter is but seasonal.

As a whole the main difficulty is in securing enough dry lumber to actually take care of the demands of the consuming trade. Those operating in both northern and southern stock are necessarily doing more in northern woods and are in many instances arranging to ship stock which is not as dry as it should be, because they are not able to wait until such lumber comes in in first-class shipping condition.

On the whole the consensus of opinion of the local trade would indicate a very favorable showing for the coming spring months.

< NEW YORK >

The lumber market of New York and vicinity has shown some recent changes which may be taken as an indication of what the market will be throughout the spring season. So far as the volume is concerned no great change has taken place, although there has been a slight increase. The price situation is a different matter and the entire list is on a higher range than for the past few years, which is taken as an indication of strong prices for the season. Recent advances are shown in ash, oak, maple, basswood and birch. The better grades of basswood are up \$1, ash strips advanced \$2, and thick birch went up \$2. Oak flooring is firm at high prices and maple flooring has advanced \$3 on the clear grades. There is nothing to indicate a falling off in values, but it is evident that some buyers have held off, hoping for a break. The recent floods in the Middle West and the conditions prevailing at manufacturing points argue for a continued high range of values for some time to come.

< BOSTON >

There is fully as much strength displayed in the market for hardwood lumber as there has been and in some cases dealers refer to conditions as firmer, if anything. There has seldom been a time when manufacturers of hardwood lumber have been as independent as they are at the present time. Dealers in this market state that offerings are not large and very few cases are found where the holders showed any anxiety to force sales. Manufacturers in the market using large quantities of hardwood lumber during the year are found to be carrying rather small stocks as compared with past seasons.

At the present time several of the large cutting up plants are a little quiet. Others, however, are keeping plants operating to full capacity. Veneers are in fairly active demand at the present time and prices are well maintained. There is a very strong demand for plain oak and prices are firmer and higher than they have ever been. Quartered oak is not in as good demand as plain oak, but there is quite a good deal more being used than six months ago and the outlook is that buyers will want still larger lots. Chestnut is in very fair call at firm prices. Cypress

has attracted a moderate volume of new business. For maple demand is fair and prices are very well held.

< PITTSBURGH >

If the tri-state territory had not been so thoroughly washed up and flooded during the past ten days the hardwood business would be regarded as first-class. Demand from factory consumers is getting somewhat better. The tendency is to pay the prices asked with comparatively little kicking. Hardwood mills, however, are badly swamped, railroads which handle their stuff are out of commission and many yards which carry a large stock of lumber have had their lumber washed away or are pretty nearly out of business for a week or two. It is certain that there will be a big demand for hardwood lumber for construction and repair contracts on railroads and in manufacturing plants throughout the flooded district and this trade is sure to come forward toward fall.

Kentucky Lumber Company

MANUFACTURERS

POPLAR, PLAIN AND QUARTERED OAK, RED AND SAP GUM, ASH, CHESTNUT, BASSWOOD, HEMLOCK, WHITE PINE

Mills at
Burnside, Ky. Williamsburg, Ky.
Isola, Miss.

Sales Office
Cincinnati, O.

CINCINNATI

Hardwood Manufacturers and Jobbers

E. C. BRADLEY LUMBER CO.
HIGH GRADE WEST VIRGINA HARDWOODS
GOERKE BUILDING

Johns, Mowbray, Nelson Company
OAK, ASH, POPLAR & CHESTNUT
GUM AND COTTONWOOD

C. CRANE & CO.
MANUFACTURERS HARDWOOD LUMBER
1739 EASTERN AVENUE

CONASAUGA LUMBER CO.
MANUFACTURERS HARDWOOD AND PINE
FOURTH NATIONAL BANK BUILDING

KILN DRIED OAK

AND OTHER HARDWOODS

are one of our many "specialties" which are so satisfactory to others. Why not you?

Might pay you to get in touch with us. It has others

THE M. B. FARRIN LUMBER CO.

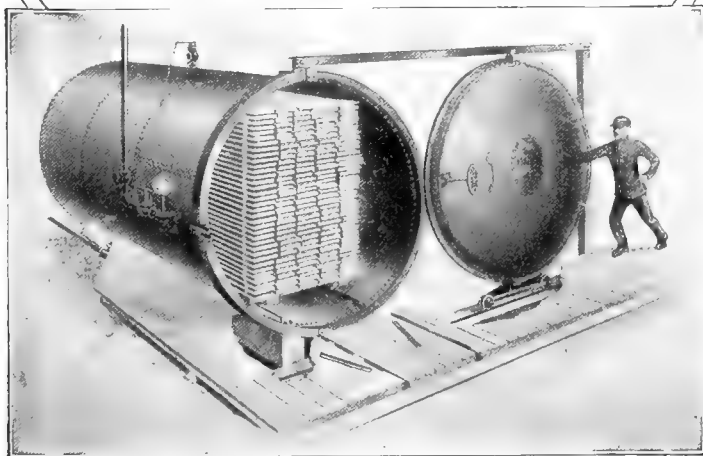
Richey, Halsted & Quick
HIGH GRADE SOUTHERN LUMBER

Kraetzer-cured LUMBER

"Everybody can sing when they have anything to sing about."—Barrie.

¶ We have a right to sing about both Kraetzer-cured Lumber and the Kraetzer Preparator, by means of which it is produced, but—we know

"The bane of many a good idea has been the intemperate zeal of its exploiters."—Cooley.



A KRAETZER PREPARATOR

Hence—

¶ While we assure you that Kraetzer-cured Lumber is vastly superior in quality to that seasoned by any process previously employed; and that it can be produced at a saving in labor, time, interest on investment, insurance, taxes, less weight and shrinkage, and higher quality of from \$3.00 to \$4.00 a thousand feet. Yet—

¶ We don't ask you to believe us, but do ask you to let us send you the names and addresses of all owners of Kraetzer Preparators, to every one of whom we can confidently refer you for commendation of both the process and the economical and satisfactory working of the apparatus.

The Kraetzer Company
537 S. Dearborn St. CHICAGO, ILL.

Kraetzer-cured LUMBER

Hardwood men in general regard the outlook as very promising with the exception of the delayed shipments which are sure to be reported in the near future.

◀ BUFFALO ▶

The hardwood trade has been very fair during the past month, the main difficulty having been the getting hold of stock. Buffalo has been very well favored in not having any flooded conditions to affect its hardwood yards, and for this reason is well supplied with dry stocks in the various woods most wanted. Dealers believe that this will insure good business here during the next month or two. Already the unfortunate conditions prevailing elsewhere have resulted in turning more attention than usual to the stocks held by the Buffalo dealers.

Trade has been best in the same woods as have been active for some time, including plain oak, ash, birch and maple. All are very firm in price. Furniture manufacturers as a rule are busy, and as they have not bought largely present conditions in the flooded districts are expected to lead to larger buying from the furniture factories within a short time. Activity is also likely to be quite marked in the building line this spring, as plans have been made for a good deal of construction work.

◀ PHILADELPHIA ▶

There has been no change of any magnitude in the hardwood situation since last report. A fair volume of new business is coming in and values are well sustained. Consuming industries continue fairly busy, but buying proceeds on a conservative basis as many buyers believe there is still the probability of a break in prices; although apparently there is no sign to justify such a prediction for the near future at least. On the contrary, weather conditions in some of the southern and middle west logging sections can interfere to a considerable extent with the manufacturing of lumber. The wise wholesaler is not losing time in wasteful forebodings, but is securing himself wherever an opportunity permits of closing a deal for standard stock. Building work of the operation class has not advanced as rapidly as expected owing to a fear that as the legitimate winter months had been so mild, there would be a lap-over of cold weather into spring. At the first sign of settled weather this branch of business will proceed with vigor. There has been no suspension of the general construction work during the winter.

There is some fear of a possible forcing of values on plain oak to a prohibitive height, which will necessitate a search for substitutes. The stock of oak continues scarce, and the tendency is upward in price; quartered oak is still strengthening; ash is making new friends; sound wormy chestnut is advancing, and inquiries multiply; high-grade chestnut, although not keeping pace with some of the other woods, holds firm; poplar unweakened; birch and beech are in good call. The veneer and mahogany markets maintain good reputation. All low grades are pretty well sold up.

◀ BALTIMORE ▶

Whatever may be said of other divisions of the lumber trade, hardwoods are not only holding their own, but the advance in prices seems to continue and there are good reasons for assuming that the highest figures have not yet been reached. One of the matters that are receiving consideration now is the possible effect of the floods and cyclones in the Middle West. There can be no doubt that great quantities of lumber will be required to repair the damage done, which can hardly fail to cause such a heavy drain upon the sources of supply as to send values to still higher figures. As it is, the range of the quotations is very firm, with stock so small that dealers are unable to provide adequately for their needs. Inquiry at the mills elicits the information that generally the producers have no extensive stock to draw upon. In various divisions of the trade the manufacturers are entirely sold out, while the demand keeps up and the search for lumber goes on. Even with the production at its maximum now, some time must elapse before any marked impression could be made upon the situation. For the present the inquiry appears to run ahead of the output; at any rate, practically all the members of the trade could dispose of large quantities of lumber if they were obtainable. Both the millmen and the wholesalers are confronted by the difficulties of the situation, which are in the main that no one can tell exactly what lumber is really worth. If the wholesaler takes an order without having the stocks needed to fill it, he may easily find himself in the position of having to go on a diligent hunt and pay more than he gets. Great care and caution are necessary now to avoid actual losses.

Even extra wide poplar is coming into its own once more, a marked improvement in prices having taken place. Poplar men find an explanation for this in the reports that the automobile builders are going back to wood for bodies in place of the sheet steel which they have been using. They have found by experience that wood makes a more elastic construction, is lighter and does not rattle, which is the case with the steel bodies. Especially in the higher grade cars there is said to be a noticeable tendency to go back to wood as having various important advantages over metal. Oak is higher than ever, with prices evidently still going upward, and the foreign markets not at all congested, although the export movement has been quite heavy of late and seems to be on the increase. Sound wormy chestnut is still finding ready takers; in fact,

the demand, if anything, is more active. Other grades of chestnut are likewise firm or higher, and all of the other hardwoods are not far behind. The lower grades of poplar are comparatively quiet, with prices perhaps a shade easier than was the case some time ago; but the prospects are that the entire list will continue strong and that the demand will suffice to absorb promptly any quantity of lumber which the mills can turn out.

◀ COLUMBUS ▶

The general condition of the market outside of flood conditions is about the same as the previous fortnight. There is a good demand for all grades and varieties of hardwoods, especially oak and chestnut. Plain and quartered oak are selling well and stocks are growing scarce. Both red and white oak are selling well. Chestnut is another strong point in the market and all grades are in demand, especially sound wormy.

Walnut is becoming more active and the same is true of ash. There is also a better demand for poplar and prices are ruling strong. Stocks in poplar are not as large as formerly. It is still too early to foretell the effects of the flood on the hardwood trade, although it is believed the rebuilding of hundreds of houses will stimulate the trade in many ways.

◀ CINCINNATI ▶

Up to last week when the heavy rains set in all over this section, demand for all hardwoods was fine and what mail has been received from distant points out of the flood zone still shows a strong demand. Local business on account of floods for miles around is suspended and it will be a couple of weeks before much can be expected in the hardwood line of trade in shipments, except that which comes direct from mill points in the South not affected by the water that is rapidly rising in some southern points. There is no change in prices noted on any items and most hardwoods are hard to obtain in dry stocks and manufacturers claim that green stock now on sticks is pretty well sold ahead. The prospects for a big year in hardwoods never were better and dealers are looking forward to better business this year than last.

The low grades of poplar are scarce and high in price and the improvement noted in the No. 1 common and better grades is very encouraging to dealers. Prices are firm and the scarcity of the low grades is growing, the box factories taking all stock of this class readily.

While the weather is good and favorable to building on the hilltops, the between season period is on and consequently demand for material is very light. All local planing mills are very busy and have been all winter working on stock sizes, a large quantity of which will be necessary to take care of the heavy building business that is anticipated. Much stock of this kind is being accumulated. Dealers also have bought heavily of this class of stock and will likely have to buy much more, as the building season will open up at any time now. Prices are likely to be higher than last year, due to the increased cost of most all kinds of rough lumber suitable for millwork.

◀ TOLEDO ▶

Hardwood lumber has been scarce here for months past and great difficulty has been experienced in securing a sufficient supply of dry stock in wanted materials. The mills seem to have no surplus stock on hand and indeed in some sections the stock is being sold clear up to the saw. This augurs ill for the securing of supplies, the necessity for which could not have been foreseen. Retail dealers too have been backward about buying, having taken only such stocks as they need for immediate use, fearing to indulge in speculative buying of any sort. The local yards in consequence are not specially well filled and the unusual demands which will be made upon them within the next few weeks is likely to prove a source of no small embarrassment. Just what the outcome will be remains to be seen, but it is safe to assume it will not tend towards weakening the prices which remain firm in all lines.

◀ INDIANAPOLIS ▶

The hardwood lumber trade in Indianapolis and vicinity has been practically at a standstill for the last two weeks. Owing to crippled transportation and mail facilities, it has been impossible to transact much business. Very few hardwood shipments are moving in or out.

It is said the outlook for the hardwood trade, after conditions have righted themselves—which will be in two or three weeks—is very encouraging. Manufacturing concerns throughout the state using hardwoods have suffered heavy losses to their plants and in some instances their hardwood stocks have been washed away.

There has been no change in hardwood prices recently. There is still a marked scarcity in one-inch oak.

◀ MEMPHIS ▶

The demand for hardwood lumber here continues good but the outlook is not quite so favorable from the standpoint of production, owing to the flood in the Mississippi, which promises to be one of the most serious in the history of this territory. Some of the manufacturing plants at Memphis have already found it necessary to close down and, whether the levees hold or not, there is certain to be a great many mills which will

SAWYER GOODMAN CO.

MARINETTE, WIS.

Mixed Cars of Hardwood, Basswood, White Pine and Hemlock, Cedar Shingles and Posts

We make a specialty of White Pine Beveled Siding and White Pine Finish and Shop and Pattern Lumber

The Tegge Lumber Co.

High Grade
Northern and Southern
Hardwoods and Mahogany

Specialties
OAK, MAPLE, CYPRESS, POPLAR
Milwaukee, Wisconsin

Most of our logs have developed the finest mottle and stripe.

All are producing clear wide flitches and lumber.

Hence the veneer runs above the average in width.

Our band saw, slicer and dryer are now running regularly

Giving us mahogany lumber and veneer to fill any order.

A particularly beautiful figure for discerning piano trade shows in a number of the logs cut.

Nothing better was ever produced.

Your inspection is invited.

Fred W. Black Lumber Company
Chicago, Ill.

Take Douglas Park L to 40th Ave. and walk one block South

TIMBER ESTIMATES

REPORTS INCLUDED
TOPOGRAPHICAL MAP, DETAIL ESTIMATES & WRITTEN REPORT

GARDNER & HOWE

ENGINEERS

Clarence W. Griffith Department Manager, Memphis, Tenn.
Porter Building.

Bluestone Land & Lumber Company

MANUFACTURERS

WEST VIRGINIA HARDWOODS

Soft White Pine, Oak, Poplar, Chestnut, Hemlock

Band Sawed Stock

COMPLETE PLANING
MILL FACILITIES

RIDGWAY
PENNSYLVANIA

Mutual Fire Insurance

Best Indemnity at Lowest Net Cost
Can Be Obtained From

- The Lumber Mutual Fire Insurance Company, Boston, Mass.
- The Lumbermen's Mutual Insurance Company, Mansfield, Ohio.
- The Pennsylvania Lumbermen's Mutual Fire Insurance Company, Philadelphia, Pa.
- The Indiana Lumbermen's Mutual Insurance Company, Indianapolis, Ind.
- The Central Manufacturers' Mutual Insurance Company, Van Wert, Ohio

The Record

When northern pine forests ceased to yield lumber sufficient to supply commercial needs, production of northern hemlock and of southern pine and the value of both kinds of timber increased rapidly. A broader demand was created for it.

The crest of southern pine production has been passed. From the top record of 16,277,185,000 feet in 1909 the cut dropped to 12,896,706,000 feet in 1911. A further decrease of at least 25 per cent will be shown in the next ten years.

To make good this deficit in the supply production of western lumber will have to be increased at least 60 per cent. That will bring about a rapid increase in the demand for and value of western timber.

This is an inevitable FACT
Are YOU preparing to profit by it?

Buy Western Timber NOW
before the Big Advance sets in

We are offering some tracts that will make excellent investments and will be glad to give complete information about them.

James D. Lacey & Co.
Timber Land Factors

Chicago, Ill., 1750 McCormick Building
Portland, Ore., 1104 Spalding Building
Seattle, Wash., 1009 White Building

find it impossible to operate during the prevalence of the present high stage of the Mississippi. This view of the situation is causing somewhat increased firmness on the part of holders of hardwood lumber. The flood is restricting logging operations and the handling of timber and is also an influence in that respect because tending to reduce the amount of logs available for the mills.

Plain oak is a very ready seller in all grades and is bringing full prices. There is also strong demand for the lower grades of cottonwood and gum which are being used largely in box manufacturing plants. The supply of neither is large enough for requirements, with the result that prices are somewhat in favor of the seller. The movement of ash is moderately large. Those who have thick stock to sell are meeting with no difficulty in disposing thereof. There is a fairly good demand for quartered oak and prices are about the same as recently. Cypress is moving in considerable volume but prices are not more than holding their own. Export business continues quite satisfactory.

< NASHVILLE >

Good lumber is at a premium, for dry stocks continue light and prices, therefore, are still high. No considerable damage resulted from the recent floods and storms, although more or less timber was destroyed and the high waters somewhat interfered with the operations of mills on the river banks and with the hauling over rural roads. The amount of rebuilding which will necessarily follow the storm damage will naturally benefit the lumber trade, both wholesale and retail, considerably.

As to the business done on the local hardwood market, it continues about on a par with that of several weeks past, although the situation seems satisfactory to the members of the trade. Plain oak is still leading in the demands and quartered oak is now not far behind it. Ash, chestnut, hickory and cottonwood are holding their own; gum is slightly off; elm, basswood and poplar are about stationary; cypress is steady.

There is a steady volume of business at good prices. The retail trade is improving as the weather settles for spring. Box, sash and door makers report improved business and all other consuming plants are busy. Mill stocks of the lower grades are very low and this increases calls for upper grades. Several buyers from other cities have recently been here. High tides on the Cumberland river will bring large log shipments to Nashville. Many millions of feet have already come this season. The prediction is that 1913 will break the record here for building operations.

< LOUISVILLE >

Louisville is rapidly recovering from the effects of the second flood of the year, and those concerns which were compelled to fight the high waters directly have seen with relief the rapid ebb of the river from its record stage. While others realize that the delays and interruptions to which their business had been subjected by reason of broken postal and transportation facilities are rapidly disappearing. It is believed that another week will find matters close to normal, with business moving on as usual. It is believed that the flood will not have a serious effect on business, as fundamental conditions remain good. The demand is continuing, and lumber will be needed just as before, with perhaps a slight incidental increase due to the demand for construction purposes on the part of the railroads and others. Consequently the sentiment is optimistic all around. Prices are steady, with plain oak continuing to hold the pace both as to sales and price. Quartered oak is also in good demand, with ash showing continued strength. Poplar is moving somewhat better. Cottonwood is also in demand. The remainder of the month will be of value as indicating prospects for the next quarter. If trade holds up, in spite of disadvantageous conditions which have been created, it may safely be assumed that things are on a sound and substantial basis, auguring a good year for 1913 at large.

< ST. LOUIS >

The local hardwood situation is fairly good and to a certain extent is satisfactory to the majority of the hardwood lumbermen. Quite a nice volume of business is being done, with nearly every item on the list being in demand. Dry plain white oak is very scarce and in order to hurry shipments of this item to their customers, lumbermen are utilizing the dry-kilns of the planing mills and sash and door factories to dry green wood for quick shipments. Quartered oak, gum, and cottonwood are having a steady movement and the demand for poplar is increasing. Ash is also having a good sale. Owing to the scarcity of these items in the producing territory in the South, where it is almost an impossibility to obtain dry stocks, and on account of the increasing rains and floods, the situation is getting still more acute. A good price is obtained for these items and dealers having any on hand find it possible to obtain almost any reasonable prices. There is also considerable strength shown in sap gum, the lower grades of this item being in very good request. Red gum is also being called for quite freely. Cypress continues to be a good seller and considerable is going out at quite good prices. Stocks, however, are running low, owing to delays in inbound shipments. The prospects are very bright for a good lively trade not later than the middle of the month, as building operations are likely to start at almost any time, now that the weather is becoming seasonable.

◀ MILWAUKEE ▶

Wholesalers say that the shortage of most lines of northern hardwoods is resulting in a stronger demand for oak, but shipments of both plain and quartered grades are so light that the supply of oak is far from being equal to requirements. Prices which are being demanded by the southern mills seem rather stiff to local buyers, but they are paid in most instances. Hardwood flooring manufacturers say that there is a real shortage of flooring material. Birch is scarce, as usual; in fact the supply of dry high-grade stuff is practically exhausted. The supply of basswood is decreasing, as a result of the stronger demand from the box manufacturers.

The furniture plants here and about the state seem to be busy and wholesalers say that they have been placing some good orders in this field. The implement factories are not buying quite so much material at this time, owing to the fact that they have passed their busiest season. The sash and door concerns are placing their orders more freely, evidently preparing for the rush of the spring building season.

Logging operations in northern Wisconsin are now at an end, owing to the warm weather. Most of the logging concerns were fortunate in being able to get most of their logs skidded and to the shipping points before the close of the season. Although the season closed earlier than usual, it is said that the total log output will be considerably larger than that of the previous year.

◀ DETROIT ▶

Conditions in the Detroit hardwood market are generally satisfactory. Prices are high and firm. Hardwood stocks are reported fairly plentiful with the exception of thick ash, and the price on this material has increased from \$2 to \$6 per M. Dealers are optimistic for spring trade and a large demand for interior finish is predicted, due to the large amount of building which is already under way. The flooring trade remains in a flourishing condition with orders and inquiries plentiful. The veneer trade is in very good condition while the box factories show renewed activity with large orders for crating lumber.

◀ GLASGOW ▶

The business passing in this section continues on moderately active lines, a fairly steady movement into consumption taking place while a good all-round inquiry is in evidence. If evidence were needed of the enormous inconvenience caused by the recent prolonged carters' strike, it is to be found in the present appearance of the docks. Although enormous quantities of timber of all kinds have been removed within the past few weeks, the cartage facilities available have proved totally inadequate to cope with the situation. In some cases goods sold two months ago are only now being removed. It has been a sickening affair from the timber trade point of view and more annoying still because that had nothing to do with the dispute. Naturally a lull occurred in buying and it is only to be hoped that a greater activity will now evince itself during the remainder of the year and that the past strike will not be a precursor of more to follow. The present high prices of course affect the situation to a certain extent, though it is not expected that any decrease will take place and just as likely that no appreciable advance will occur. No doubt some woods such as Canadian yellow pine will probably increase from year to year, but in the case of such woods as spruce and pitch pine, where freights play an important part, it is entirely different.

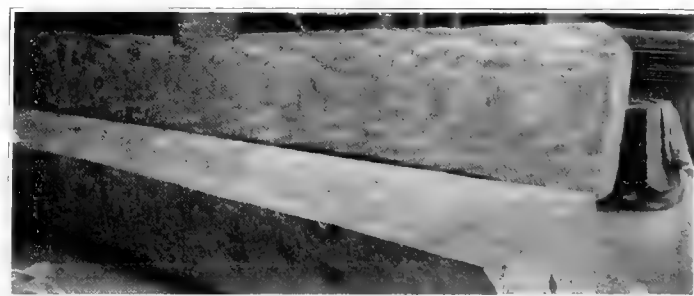
It is said that never before has such a poor season been experienced by Quebec shippers who are on their yearly visit. Small or no contracts are reported, due to the limited stocks shippers have available and to a larger extent to the high prices being quoted. Most buyers are at present taking stock and naturally are disinclined to increase their holdings except for immediate requirements. The spot business in pitch pine is rather quiet meantime, and little C. I. F. selling is being done. The stock held is considerable and, such being the case, buyers are somewhat reluctant to face the present high C. I. F. quotations, believing they may be able to do better later on. Advices from the other side as well as recent freight fixtures all point to decreasing freights and shippers with high freight in hand are anxious to push sales as quickly as possible. Buyers, seeing this, are of course not inclined to be pushed. At all events, freights will certainly have fallen by May or June.

Recent arrivals include chiefly spruce deals and birch logs. Of the latter, there has been a considerable import, chiefly round logs on contract. The spruce deals have sold well, but prices are not yet up to shippers' ideas. Two cargoes of American hardwoods have arrived within three days of one another—viz., SS "Indrani" from Baltimore and SS "Kastalia" from Baltimore and Newport News. Both of these shipments practically consist of oak planks and poplar, a few walnut and oak logs, and a few hundred hickory logs. The oak is chiefly on contract for the various railway companies and the hickory logs are mostly on contracts made to various buyers some months ago. One of the large railway companies of Glasgow has just fixed its supply of oak scantlings with the various merchants throughout the city. The Clyde timber brokers stock lists will be issued in a few days and there is no doubt that a pronounced all-round shrinkage will be revealed.

Foreign and Domestic Cabinet Woods in Lumber or Veneers

No order is too big—no order too little—to secure our painstaking attention, and prompt service.

While Mahogany is our specialty, with the largest stock of prime figured wood in the country, one of our side lines is Black Walnut, of which we have more than 1,250,000 feet of logs in rollways at our Chicago plant today.



SPECIMEN OF SPLENDID CUBAN MAHOGANY LOGS NOW BEING OPENED UP PREPARATORY TO SAWING INTO VENEERS.

Users of high-class Foreign or Domestic Veneers or Lumber visiting Chicago are especially invited to call and inspect our plant and lumber and veneer warehouses at Robey Street and Blue Island Avenue. Take Blue Island Avenue car at the postoffice to Robey Street.

C. L. WILLEY, Chicago

Largest Mahogany Veneer and Lumber Producing Plant in the World

THIS IS OUR RECORD

In Business	- - - - -	7 $\frac{3}{4}$ Years
Losses Paid	- - - - -	\$1,100,000
Savings Effected for Subscribers	- - -	700,000
Quick Assets Belonging to Subscribers	-	775,000

More Cash Assets to each \$100 of Outstanding Liability than the Largest Stock Companies

Entire Interest Earnings Paid to Subscribers

Experience has demonstrated that from one-third to one-half of the cost of their insurance can be saved to the LUMBERMEN by carrying ALLIANCE POLICIES. Give us the opportunity to make these substantial savings for YOU.

Lumbermen's Underwriting Alliance

U. S. EPPERSON & COMPANY, ATTY. & MGR.

R. A. Long Bldg.

Kansas City, Mo.

Advertisers' Directory

NORTHERN HARDWOODS.

American Lumber & Mfg. Co.	12
Beecher & Barr	13
Buffalo Hardwood Lumber Co.	68

Cartier-Holland Lumber Company	2
Coale, Thos. E., Lumber Company	13
Cobbs & Mitchell, Inc.	3
Craig, W. P., Lumber Co.	13
Curl, Daniel B.	13

East Jordan Lumber Company	60
Elias, G., & Bro	66
Estabrook-Skeele Lumber Co.	4

Flanner-Steger Land & Lumber Co.	4
Forman, Thos., Company	60

Goodyear, C. A., Lumber Co.	5
-----------------------------	---

Hanson-Turner Company	62
Heyser, W. E., Lumber Co.	11
Holyoke, Chas.	12
Holloway Hardwood Lumber Co.	2

Jones Hardwood Company	12
------------------------	----

Kent, J. S., Company	12
Klann, E. H., Lumber Co.	53
Kneeland-Bigelow Company, The	3

Litchfield, William E.	12
------------------------	----

McIlvain, J. Gibson, & Co	2
McLean, Hugh, Lumber Co.	66
Miller, Anthony	66
Mitchell Bros. Company	3
Mowbray & Robinson Company	11

Osgood & Richardson	53
---------------------	----

Palmer & Parker Co.	13
Parry, Chas. K., & Co.	64

Sawyer-Goodman Company	47
Standard Hardwood Lumber Co.	6
Stearns Salt & Lumber Company	9
Stephenson, I., Company, The	60
Stewart, I. N., & Bro.	64
Stimson, J. V., & Co.	66
Struthers Cooperage Company	60
Sullivan, T. & Co.	66

Taylor, W. R., Lumber Company	12
Tegge Lumber Co.	47

Vinke, J. & J	60
VonPlaten Lumber Co.	60

Webster, George, Lumber Company	13
White, Wm. H., Co.	68

Wiggin, H. D.	12
Williams, Ichabod T., & Sons	14
Willson Bros. Lumber Company	12
Wistar, Underhill & Nixon	13
Wood-Mosaic Company	13

Yeager, Orson E.	66
Young, W. D., & Co.	3

POPLAR.

Anderson-Tully Company	9
Atlantic Lumber Company	13
Farrin, M. B., Lumber Company	45
Faust Bros. Lumber Company	14
Kentucky Lumber Company	45
Logan, J. M., Lumber Co.	6
Maphet & Shea Lumber Company	6
Radina, L. W., & Co.	11

Swann-Day Lumber Company	44
Vansant, Kitchen & Co.	68
West Virginia Timber Company	7
Whiting, Wm. S.	65
Wood, R. E., Lumber Company	13
Yellow Poplar Lumber Company	68

SOUTHERN HARDWOODS.

American Lumber & Mfg. Co.	12
Anderson-Tully Company	9
Atlantic Lumber Company	13

Baker-Matthews Mfg. Co.	65
Bennett & Witte	11
Black, Fred W., Lumber Co.	47
Bluestone Land & Lumber Co.	48
Boice Lumber Company	64
Booker-Cecil Company	10
Bradley, E. C., Lumber Company	45
Brown, W. P., & Sons Lumber Co.	10
Buffalo Hardwood Lumber Co.	66

Carrier Lumber & Mfg. Co.	14
Cherokee Lumber Co.	7
Coale, Thos. E., Lumber Company	13
Conasauga Lumber Company	45
Crane, C., & Co.	45
Curl, Daniel B.	13

Davis, Edward L., Lumber Company	10
Dempsey, W. W.	65
Duhlmeier Brothers	11

Elias, G., & Bro.	66
Estabrook-Skeele Lumber Co.	4

Farrin, M. B., Lumber Company	45
Faust Bros. Lumber Co.	14
Flanner-Steger Land & Lumber Co.	4

Garetson-Greaseon Lumber Co.	65
------------------------------	----

Heyser, W. E., Lumber Company	11
Hill Brothers Tie & Lumber Co.	65
Himmelberger-Harrison Lumber Co.	65
Holloway Hardwood Lumber Co.	2
Huddleston-Marsh Lumber Co.	4

Jones Hardwood Company	12
Johns-Mowbray-Nelson Company	45

Kennedy, James, & Co.	44
Kent, J. S., Company	12
Kentucky Lumber Company	45
Kimball & Kopcke	6
Klann, E. H., Lumber Co.	53
Kosse, Shoe & Schleyer Company	44

Lamb-Fish Lumber Co.	8
Litchfield, William E.	12
Littleford, George	44
Little River Lumber Company	68
Logan, J. M., Lumber Co.	6
Louisiana Long Leaf Lumber Co.	64
Louisville Point Lumber Company	10

Maley, Thompson & Moffett Co.	11
Maphet & Shea Lumber Company	6
McIlvain, J. Gibson, & Co	2
McLean, Hugh, Lumber Co.	66
Miller, Anthony	66
Mowbray & Robinson Company	11

Nettleton, E. B., & Co.	53
Norman Lumber Company	10

Ohio River Saw Mill Company	10
Osgood & Richardson	53
Paepcke-Leicht Lumber Company	8
Parry, Chas. K., & Co.	64
Radina, L. W., & Co.	11

Ransom, J. B., & Co.	7
Riemeier Lumber Company	44
Richey, Halsted & Quick	45
Russe & Burgess, Inc.	14

Salt Lick Lumber Company	65
Shawnee Lumber Company	44
Shiels, Chas. F., & Co.	44
Slaymaker, S. E., & Co.	44
Standard Hardwood Lumber Co.	66
Stewart, I. N., & Bro.	66
Stimson, J. V., & Co.	64
Sullivan, T., & Co.	66
Swann-Day Lumber Company	44

Vansant, Kitchen & Co.	68
Vestal Lumber & Manufacturing Co.	6
Vinke, J. & J.	60
Von Platen Lumber Co.	60

Webster, George, Lumber Company	13
West Virginia Timber Company	7
Whiting, Wm. S.	65
Whitmer, Wm., & Sons	7
Wiggin, H. D.	12
Williams, Ichabod T., & Sons	14
Willson Bros. Lumber Company	12
Wisconsin Lumber Company	5
Wistar, Underhill & Nixon	13
Wood-Mosaic Company	13
Wood, R. E., Lumber Company	13

Yeager, Orson E.	66
------------------	----

VENEERS AND PANELS.

Adams & Raymond Veneer Co.	63
Ahnapee Veneer & Seating Co.	62
Astoria Veneer Mills & Dock Co.	63
Black, Fred W., Lumber Co.	47
Central Veneer Company	61
Hanson-Turner Company	62
Hoffman Bros. Company	61
Huddleston-Marsh Lumber Co.	4
Jarrell, B. C., & Co.	61
Kentucky Veneer Works	61
Kiel Wooden Ware Company	62
Knoxville Veneer Company	6
Louisville Veneer Mills	10
Maley, Thompson & Moffett Co.	11
Memphis Veneer & Lumber Co.	61
Mengel, C. C., & Bro. Company	10
Ohio Veneer Company	44
Putnam Veneer and Lumber Co.	63
Rayner, J.	4
Rice Veneer & Lumber Company	63
Southern Veneer Manufacturing Company	61
Underwood Veneer Company	63
Veneer Manufacturers' Company	5
Walker Veneer & Panel Co.	53
Willey, C. L.	49
Williams, Ichabod T., & Sons	14
Wisconsin Seating Company	62
Wood-Mosaic Company	13

MAHOGANY, WALNUT, ETC.

Astoria Veneer Mills & Dock Co.	63
Black, Fred W., Lumber Co.	47
Duhlmeier Brothers	11
Huddleston-Marsh Lumber Co.	4
Littleford, George	44
Maley, Thompson & Moffett Co.	11
Memphis Veneer & Lumber Co.	61
Mengel, C. C., & Bro. Company	10
Palmer & Parker Co.	13
Purcell, Frank	65
Rayner, J.	4

Struthers Cooperage Company	60
Willey, C. L.	49
Williams, Ichabod T., & Sons	14

HARDWOOD FLOORING.

Beecher & Barr	13
Carrier Lumber & Mfg. Co.	14
Cobbs & Mitchell, Inc.	3
Eastman, S. L., Flooring Co.	60
Farrin, M. B., Lumber Company	45
Forman, Thos., Company	60
Kerry & Hanson Flooring Co.	60
Louisiana Long Leaf Lumber Co.	64
Mitchell Bros. Company	3
Salt Lick Lumber Company	65
Stearns Salt & Lumber Company	9
Stephenson, I., Company, The	60
Webster Lumber Co., George	13
White, Wm. H., Co.	68
Wilce, T., Company, The	5
Young, W. D., & Co.	3

WOODWORKING MACHINERY.

Cadillac Machine Co.	58
Linderman Machine Co., The	67
Mershon, W. B., & Co.	12
Phoenix Manufacturing Co.	12
Saranac Machine Company	58
Steinmetz, C. M.	12
Westinghouse Electric & Mfg. Co.	56

LOGGING MACHINERY.

Baldwin Locomotive Wks.	57
Clyde Iron Works	56
Lidgerwood Mfg. Co.	58
Russel Wheel & Foundry Co.	59

DRY KILNS AND BLOWERS.

Grand Rapids Veneer Works	60
Kraetzer Company, The	46
National Dry Kiln Company	58
Phila. Textile Mch. Co.	12

SAWS, KNIVES AND SUPPLIES.

Atkins, E. C., & Co.	55
Simonds Mfg. Co.	57

LUMBER INSURANCE.

Central Manufacturers' Mut. Ins. Co.	48
Epperson, U. S.	50
Indiana Lumbermen's Mut. Ins. Co.	48
Lumber Mutual Fire Insurance Co.	48
Lumbermen's Mutual Ins. Co.	48
Lumbermen's Underwriting Alliance	50
Lumber Underwriters	14
Pennsylvania Lumbermen's Mutual Fire Ins. Co.	48
Rankin, Harry & Co	5

TIMBER LANDS.

Lacey, James D., & Co.	48
Spry, John C.	5

TIMBER ESTIMATORS

Griffith, Clarence W.	48
McDonald, Thos. J.	52

MISCELLANEOUS.

Astoria Veneer Mills & Dock Co.	63
Childs, S. D., & Co.	53
Gerlach, The Peter, Company	53
Kraetzer Company, The	46
Lumbermen's Credit Association	4
Mechanical Rubber Company	57
Tammis Silica Company	53
Westinghouse Electric & Mfg. Co.	56

CLASSIFIED ADVERTISEMENTS

Advertisements will be inserted in this section at the following rates:

For one insertion.....20c a line
For two insertions.....35c a line
For three insertions.....50c a line
For four insertions.....60c a line

Eight words of ordinary length make one line.
Heading counts as two lines.
No display except the headings can be admitted.

Remittances to accompany the order. No extra charges for copies of paper containing the advertisement.

EMPLOYMENT WANTED

WANTED—COMPETENT MALE STENOGRAPHER

experienced in the lumber business. Only experienced stenographers need apply. Give references and experience. Address

"BOX 40," care HARDWOOD RECORD.

WANTED—EMPLOYMENT

When you want a salesman for New York state territory, write us. We can supply you with a good man. EMPIRE STATE ASSOCIATION of Wholesale Lumber & Sash & Door Salesmen. Chas. Johnson, Sec'y, 96 Kirkland Rd., Rochester, N. Y.

TIMBER ESTIMATING

TIMBER ESTIMATES

Estimating Southern timber a specialty. Maps, detailed reports as to stand, quality and logging conditions. Have a few high-class properties for sale. Can furnish best references.

THOS. J. McDONALD,
East Tenn. Natl. Bank Bldg.,
Knoxville, Tenn.

WAGON STOCK WANTED

I AM IN THE MARKET FOR

75 to 100 cars of oak poles, bolsters, and boards, eveners, and reaches; and hickory and maple axles. Will inspect at shipping point, and pay cash. E. B. BROWN, 372 Bayne St.,

Buffalo, N. Y.

LOGS WANTED

WANTED—BLACK WALNUT LOGS

500 cars good black walnut logs, 10" and up in diameter, 6 ft. and up long. Will inspect at shipping point and pay cash.

GEO. W. HARTZELL, Dayton, Ohio.

WANTED—HARDWOOD LOGS

200,000 ft. 28" and up White Oak logs.
200,000 ft. 12" and up Walnut logs.
50,000 ft. 12" and up Cherry logs.
C. L. WILLEY, 2558 S. Robey St., Chicago.

TIMBER LANDS FOR SALE

ARE YOU INTERESTED IN GUM and Red Oak?

I own in fee simple two small and carefully selected tracts of high-class gum and red oak stumpage. Will sell at price to make the buyer good money either as an investment or as an operating proposition.

Will deal with principals only. Address in confidence, "BOX 22," care HARDWOOD RECORD.

FOR SALE—VALUABLE TRACT OF

Hardwood Timber; 7,000 acres virgin forest immediately on branch line of the Southern Ry. in western N. C.; title perfect. For further information address, F. R. HEWITT, Hewitt, N. C.

LUMBER FOR SALE

FOR SALE—FOR QUICK SHIPMENT

30,000 ft. 5 4 dry Basswood, about 2, 1sts and 2nds, $\frac{1}{4}$ No. 1 common.

VAN KEULEN & WINCHESTER LBR. CO.,
Grand Rapids, Mich.

FOR SALE—THE ENTIRE CUT OF

my mill, just beginning in virgin forest of post oak, red and white oak and pine. Will make an attractive price to some one to take entire cut. W. C. BYINGTON, Fountain Hill, Ark.

OAK, POPLAR, ASH

and all other hardwoods, in all grades and thicknesses, can be readily sold if advertised in the Wanted and For Sale section of HARDWOOD RECORD. If you have a large stock you want to sell try a few lines in this department and see what a lot of inquiries they will bring you.

DIMENSION STOCK FOR SALE

FOR SALE AT DE KALB, ILL.

Clear, and 1st and 2nd, Dimension Oak, one to two years air-dried, as follows:

2,000 pieces $1\frac{1}{2}$ x $3\frac{1}{2}$ x 9'3".
6,000 pieces $1\frac{1}{4}$ x $4\frac{1}{4}$ x 2'4".
10,000 pieces, 3 x $3\frac{3}{4}$ x 4'5".
7,500 pieces 2 $\frac{5}{8}$ x $3\frac{3}{4}$ x 4'5".
2,000 pieces 3 x $3\frac{3}{4}$ x 3'7".
1,000 pieces 2 $\frac{5}{8}$ x $3\frac{3}{4}$ x 3'7".
2,000 pieces 3 $\frac{1}{4}$ x $3\frac{1}{4}$ x 1'7".

JACOB HAISH COMPANY, DeKalb, Ill.

DIMENSION STOCK WANTED

WANTED—HARD MAPLE SQUARES

$3\frac{1}{2}$ x $4\frac{1}{2}$ ", 4 x 5", $4\frac{1}{2}$ x $5\frac{1}{2}$ ", 5 x 6" and 6 x 6". Lengths 6", 7", 8, 12 and 14 ft. No. 1 common and better grade. Highest cash price paid. Also 1" white basswood x 4" and up wide, 8 to 16 ft. long. Write us today. HALL BROS.,
174 Mutual St., Toronto, Ont.

WANTED

DIMENSION OAK Plain and Quartered

Various sizes for chair and table factories.
Send to us for specifications and prices.

INDIANA QUARTERED OAK CO.

7 East 42nd Street,
New York.

WANTED

Hard Maple and Beech Squares 42", 44", 48" long, plump 1" x 1". Must be clear and straight. If you have any to offer write us. Will take them dry or green.

THE COLUMBIA MFG. CO.,
New Philadelphia, Ohio.

WANTED

Ten cars Dimension Stock:

1 x 1 x 16
1 x $2\frac{1}{4}$ x 16
1 x 3 x 16
 $1\frac{1}{4}$ x $1\frac{3}{4}$ x 19
2 x 2 x 19

Clear Oak. Address, "BOX 38," care HARDWOOD RECORD.

POPLAR DIMENSION STOCK

Glued-up for piano cases. Will furnish full particulars to concerns able to turn out this class of stock in carload lots. Good prices. Cash payments. Address, "BOX 39," care HARDWOOD RECORD.

LUMBER WANTED

WANTED

5/4 and 8/4" log run Cherry. Also other thick-ness. Cherry logs. 4/4" No. 3 common hardwoods, any kind. Also clear Hard Maple axles $4\frac{1}{2}$ " x $5\frac{1}{2}$ " x 6' long.

WARREN ROSS LUMBER CO., Jamestown, N. Y.

WANTED

200 M ft. 4/4 Quartered White Oak.
200 M ft. 4/4 Plain White Oak.
200 M ft. 4/4 Chestnut.
100 M ft. 4/4 Poplar.

All grades.

STANDARD HARDWOOD LUMBER CO.,
Buffalo, N. Y.

BUYERS OF HARDWOODS.

Do you want to get in touch with the best buyers of hardwood lumber? We have a list, showing the annual requirements in lumber, dimension stock and veneers and panels of consumers of those materials throughout the United States and Canada. The service is free to advertisers in the RECORD. It will interest you. Write us for further information about our "Selling Lumber by Mail System."

HARDWOOD RECORD, Ellsworth Bldg.,
Chicago.

LUMBER WANTED

Quote delivered Philadelphia, Pa., on
 4 4 log run Basswood, also on grades
 4 4 No. 3 common Basswood,
 4 4 No. 3 common Poplar,
 4/4 sound wormy Chestnut.

CHARLES C. CROSS,
 Philadelphia, Pa.

WANTED—BLACK WALNUT LOGS AND LUMBER

Good sound walnut logs 14" and up in diameter, either hewed or rough. Will inspect and pay cash at shipping point. J. W. COMLY,
 Exporter, Steubenville, Ohio.

WANTED

500,000 feet 4/4" sound wormy Chestnut, dry. Quote cash price Boston rate of freight. State when you could commence and complete shipment. Address, "BOX 37," care HARDWOOD RECORD.

WANTED TO BUY

100,000 feet 4/4, 5/4 and 6/4 log run Butternut.
 DUHLMEIER BROTHERS, Cincinnati, O.

WANTED

White Oak, hewn and sawn, also ship plank. Address G. ELIAS & BRO. for further particulars, 965 Elk Street, Buffalo, N. Y.

MOULDINGS AND TRIM

In Oak, Chestnut and Basswood, straight and mixed cars. Can use four cars per month. We pay cash and will advance payments if convenient. Address, "BOX M," care HARDWOOD RECORD.

BUSINESS OPPORTUNITIES**EXCELLENT OPPORTUNITY**

for man to go in manufacturing business. Have well-equipped hardwood factory suitable for making spokes and vehicle stock. Healthy location in town six thousand, on two rivers and two railroads. Address

"BOX 72," care HARDWOOD RECORD.

MACHINERY FOR SALE**BARGAIN IN BOILERS AND ENGINE**

- 1 300 H. P. Locomotive. Fire box boiler, 125 lb. working pressure allowed by Hartford Ins. & Insp. Co. 60 ft. 44" stock.
 - 1 14x20 self-contained Automatic Brownell Engine.
 - 2 60" Horizontal tubular boilers. Also
 - 1 50" Shaving Exhaust Fan. 42 ft. 10" Steam Feed.
- Full specifications furnished on application.

JOHN S. OWEN LUMBER COMPANY.
 Owen, Wisconsin.

FOR SALE

One left-hand Phoenix 6 foot Pony Band Mite with Carriage, Track, direct Steam Feed and Live Rolls. Used less than two years. In fine condition.

WESTERN COTTAGE PIANO & ORGAN CO.,
 Ottawa, Ill.

MISCELLANEOUS**WANTED—HARDWOOD LUMBERMEN—**

to try the Gibson Tally Book. The three-throw aluminum tally ticket cover accommodates any form of ticket desired. The use of the special triplicate tally ticket supplied, printed on waterproof paper with carbon backs makes tallies unalterable. For durability, convenience, accuracy and for systematizing the inspection of lumber the Gibson tally method can't be beat.

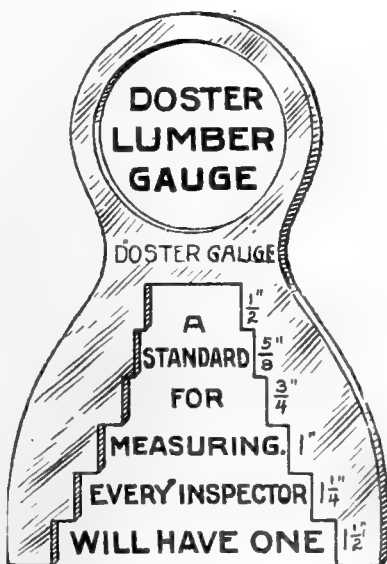
Special forms of tally tickets mailed on application. Covers sold on approval to responsible concerns.

HARDWOOD RECORD,

537 So. Dearborn St., Chicago.

NOTICE

All persons are hereby warned against accepting or giving credit on account of any guarantees or letters of credit purporting to have been signed and given by J. G. Calvert or J. G. Calvert, vice-president of the National Bank of Jersey Shore, Jersey Shore, Pa., as proceedings in lunacy are now pending against the said J. G. Calvert, in the Court of Common Pleas of Lycoming County, Pennsylvania, to Number 57, June term, 1913. MRS. JOSEPHINE S. CALVERT.



For sale by HARDWOOD RECORD,
 537 S. Dearborn St., Chicago, Ill.
 50 CENTS EACH.

CHICAGO**E. B. NETTLETON**

Southern
 Hardwoods

Pacific Coast Woods and Box Shooks
 FISHER BUILDING CHICAGO

E. H. KLANN LUMBER CO.

Cottonwood, Gum, Oak, Ash, Cypress, Yellow Pine, Dimension Stock

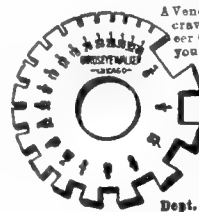
819 FISHER BLDG.

HAR. 1187

Osgood & Richardson
 935 Peoples Gas Bldg.

NORTHERN AND SOUTHERN
 HARDWOODS

Chicago Agents: LAMB-FISH LUMBER CO.



A Veneer Gauge is the answer to a Veneer User's craving for years. This "Walker Brand" Veneer Gauge is a steel gauge that will satisfy your wants for all time. You can't do yourself a better turn than to buy one of these gauges. It gauges ACCURATELY every thickness from 1-40 inch to 1/2 inch INCLUSIVE. Wake up to this opportunity. Price only \$1.98 delivered by U. S. Mail. Order now, today. Address—6456 Woodlawn Ave. Phone Hyde Park 88.

WALKER'S EYE
 Dept. C CHICAGO

99% PURE
SILICA
 OR SILEX FOR WOOD FILLERS
 TAMMS SILICA CO., 19 So. 5th Ave., Chicago

COUNTERFEIT CHECKS

are frequent except where our

Two Piece Geometrical Barier Coin is in use, then imitation isn't possible. Sample if you ask for it.

S. D. CHILDS & CO.
 Chicago

We also make Time Checks, Stencils and Log Hammers.

**Gerlach Modern Machines**

Produce the Cheapest and Best
COOPERAGE STOCK
 and BOX SHOOKS

Circular, Band and Cylinder Saws
 SAW AND LOG TOOLS
 THE PETER GERLACH CO., Cleveland, 6th City, U.S.A.

The Gibson Aluminum Tally Book Cover and Tally Tickets are now employed by more than 2,000 lumber manufacturers, dealers and consumers.

ATKINS MACHINE KNIVES



Made of steel that is successfully standing the Test of Time. WELDED scientifically, MILLED, BALANCED and GROUND as they should be. They come to you right—and stay right.

“You’ll never know until you try them”

It’s easy to do. Send specifications at once to the nearest address below. We’ll tell you how to get them to the best advantage.

Largest exclusive Knife Factory in the World located at Lancaster, N. Y.

ATKINS SILVER STEEL SAWS

“The Finest on Earth”

A Perfect Saw for Every Purpose

Atkins Always Ahead!

E. C. ATKINS & CO., Inc.

The Silver Steel Saw People

Home Office and Factory, Indianapolis, Ind.

Canadian Factory, Hamilton, Ont.

Branches carrying complete stocks in the following cities—Address E. C. ATKINS & CO.

ATLANTA
CHICAGO
MEMPHIS

MINNEAPOLIS
NEW ORLEANS
NEW YORK CITY

PORTLAND
SAN FRANCISCO
SEATTLE

VANCOUVER, B. C.
SYDNEY, N. S. W.

Westinghouse Motors form the Reliable Drive for Wood-Working Plants



AFTER Westinghouse motors are properly installed in a wood-working plant, the only attention they require is an occasional cleaning, inspection and lubrication. Beyond this, there is nothing to be done.

They are ready to start any moment they are wanted and they keep the machines they drive in continuous operation until the power is shut off. They are very rarely out of commission for repairs. Their life is very long; some of the first Westinghouse motors are still in successful operation.

Such reliability is the result of long experience in design, thorough study of operating conditions, and great care in manufacture. These factors combine to make Westinghouse motors more reliable than the service conditions, for which they are intended, require.

Of course, like any other machines, these motors must be properly installed. Westinghouse service takes care of this detail by giving full information on the installation of Westinghouse motors in any plant.

To receive full assurance of motor reliability, specify "Westinghouse Motors."

Westinghouse Electric & Mfg. Co., East Pittsburgh, Pa.

Sales Offices in all Large Cities.



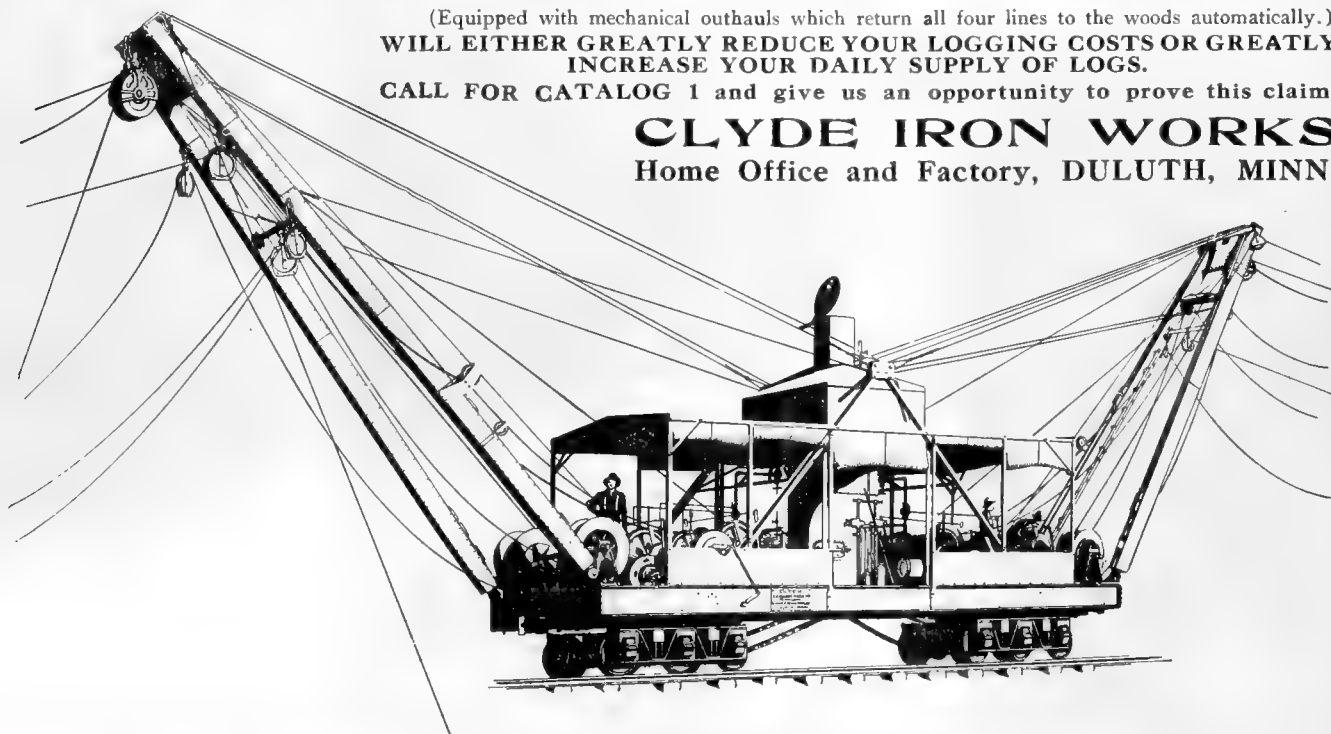
THIS FOUR LINE CLYDE SKIDDER

(Equipped with mechanical out hauls which return all four lines to the woods automatically.)
WILL EITHER GREATLY REDUCE YOUR LOGGING COSTS OR GREATLY INCREASE YOUR DAILY SUPPLY OF LOGS.

CALL FOR CATALOG 1 and give us an opportunity to prove this claim!

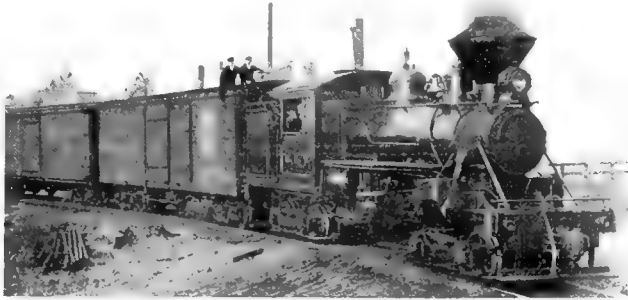
CLYDE IRON WORKS

Home Office and Factory, DULUTH, MINN.



Baldwin Geared Locomotive

Logging Locomotives must operate on steep grades, sharp curves and uneven tracks. This is what the geared locomotive illustrated has been designed to do. It is symmetrical in construction, and power is transmitted to the axles through a central drive. The valve motion is simple and accessible, and all new features have been tried out in service.



This locomotive is well-designed, well-built and fully guaranteed. Various sizes can be furnished, to suit different track and operating conditions.

THE BALDWIN LOCOMOTIVE WORKS
PHILADELPHIA, PA., U. S. A.

Cable Address:—"Baldwin, Philadelphia"

Branch Offices:
New York, N. Y., Hudson Terminal; St. Louis, Mo., Wright Building;
Chicago, Ill., Railway Exchange; Portland, Ore., Spalding Building;
Richmond, Va., Travelers Building.

SIMONDS SAWS

This illustration suggests just four of the kinds of Saws which may interest you. Our factories manufacture every kind of a Saw used around a wood-working plant or sawmill.



Our aim has always been to supply Saws and Wood-working Machine Knives that will give the maximum service and at the same time do the finest kind of work with the least amount of care. Obtaining these results is the work of experience—and we have been doing it eighty years.

Simonds Manufacturing Company

Fitchburg, Mass.
New York City
Portland, Ore.
Vancouver, B. C.

Chicago, Ill.
New Orleans, La.
San Francisco, Cal.
Lockport, N. Y.

Montreal, Que.
Seattle, Wash.
London, Eng.
St. John, N. B.

ELEPHANT RUBBER BELTING

AIR DRILL AND AIR TOOL

HOSE

STEAM
WATER
SUCTION

EXTRA QUALITY

Recommended for hard service
and guaranteed to do the work

SELLING AGENTS

CRANE COMPANY - ALL BRANCHES
STANDARD EQUIPMENT CO., MOBILE, ALA
ALBANY MILL SUPPLY CO., ALBANY, GA.

**THE MECHANICAL
RUBBER COMPANY**

(Chicago Rubber Works)

307 W. Randolph Street,
ESTABLISHED 1882

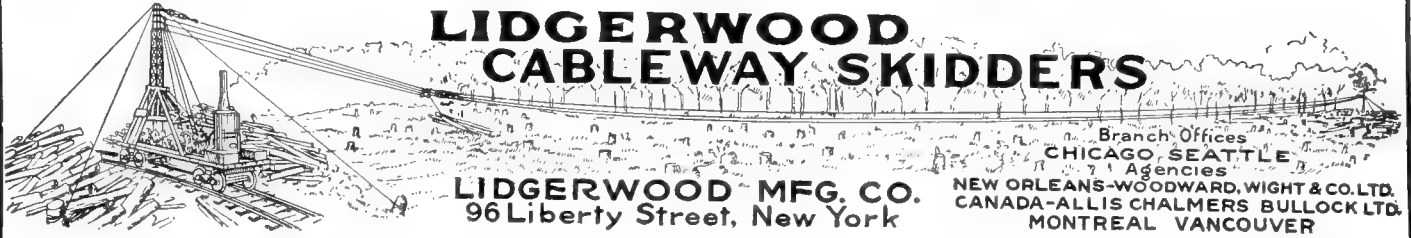
CHICAGO



The CHEAPEST HARDWOOD LOGGING

IS DONE WITH

LIDGERWOOD CABLEWAY SKIDDERS



LIDGERWOOD MFG. CO.
96 Liberty Street, New York

Branch Offices
CHICAGO, SEATTLE
Agencies
NEW ORLEANS-WOODWARD, WIGHT & CO. LTD.
CANADA-ALLIS CHALMERS, BULLOCK LTD.
MONTREAL VANCOUVER

Kiln Truck

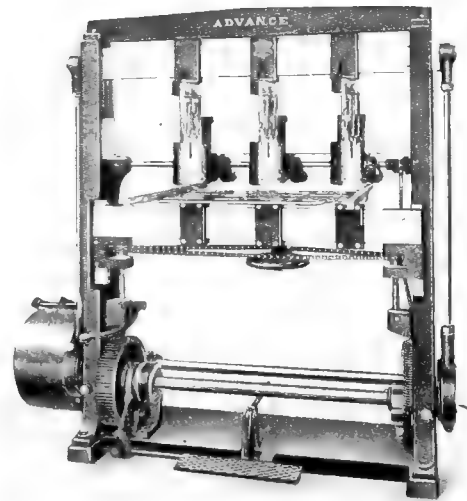


We make all styles of Kiln Trucks, Transfer Cars. They are roller-bearing, steel or malleable iron wheels. We have one contract for 4,500 6 $\frac{1}{2}$ ' trucks.

Always a large stock of material on hand. Can make prompt shipment.

The National Dry Kiln Company
Indianapolis, Indiana

Wire Stitching Machinery



FOR
Crates, Veneer and Resawed Lumber
Boxes, Also Wire and Metal Bound Boxes,

FRUIT PACKAGES, BASKETS,
FIBER SHIPPING CASES, PAPER
BOXES AND SPECIAL PURPOSES

ASK FOR CATALOGUE
Manufactured by

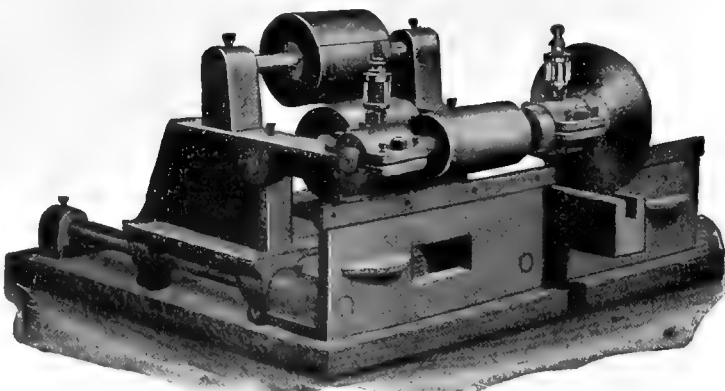
SARANAC MACHINE COMPANY
BENTON HARBOR, MICH., U. S. A.

BUTTING SAW

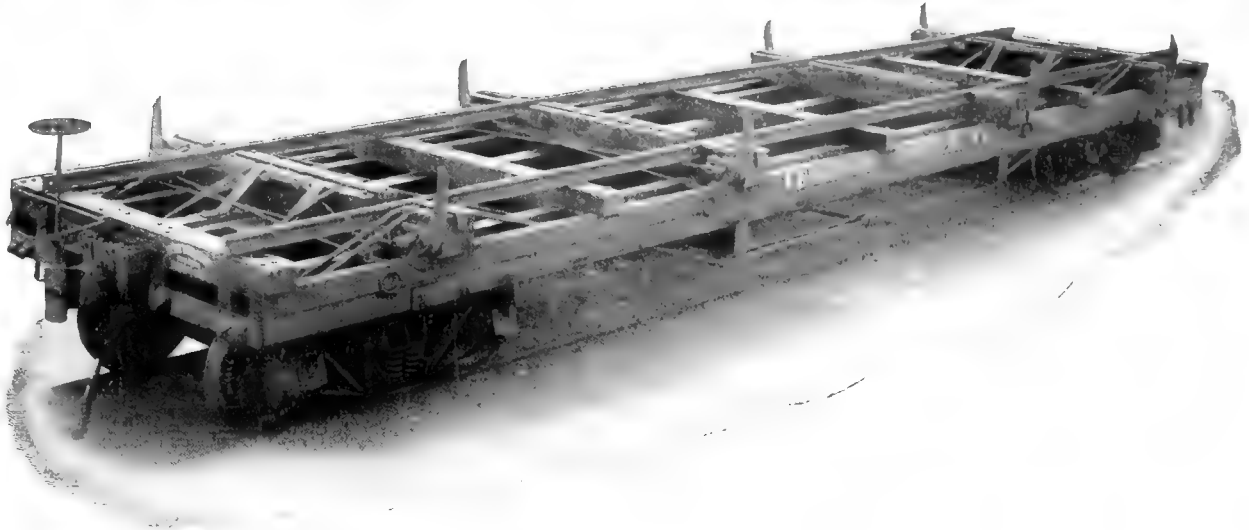
for
Flooring Factories

For cutting out defects and making square and smooth ends for end-matching machines. Used by the largest producers. Write for particulars and prices.

Manufactured by
Cadillac Machine Co.
CADILLAC, MICH.



RUSSEL LOGGING CARS



70,000 LBS. CAPACITY SKELETON TYPE RUSSEL CAR, EQUIPPED WITH LOADER RAILS AND RUSSEL PATENT DROP STAKES. THIS CAR COMPLIES WITH M. C. B. RULES AND SAFETY APPLIANCE ACTS.

Years of Hard Service Have Demonstrated Russel Cars to be Superior in Quality and Construction. Built for any Capacity Desired

RUSSEL WHEEL AND FOUNDRY CO.

DETROIT, MICHIGAN

**IF YOU WANT THE BEST SYSTEM OF ACCURATELY TALLYING AND
RECORDING LUMBER SHIPMENTS OR RECEIPTS**

YOU WILL BE INTERESTED IN

The Gibson Tally Book

This system of tallying lumber is employed by more than two thousand lumber producers, jobbers and wholesale consumers, and is available for tallying lumber, logs, flooring, dimension stock and all other commodities.

Makes three **original** tallies without the use of loose carbon sheets.

New Catalogue showing twenty-six various forms of tickets sent free on request.

Tally Book Dept., Hardwood Record, Chicago

M I C H I G A N

FAMOUS FOR HARD MAPLE AND GREY ELM

"Ideal" ^{Steel Burnished} Rock Maple Flooring

is the flooring that is manufactured expressly to supply the demand for the best. It is made by modern machinery from carefully-selected stock and every precaution is taken throughout our entire system to make it fulfill in every particular its name—"IDEAL."

ROUGH OR FINISHED LUMBER—ALL KINDS

Send Us Your Inquiries

The I. Stephenson Company - WELLS, MICHIGAN

FORMAN'S FAMOUS OAK FLOORING

Is made in faultless fashion from the most uniform-colored and even-textured oak produced; worked from Kraetzer-Cured lumber manufactured at our

Heidelberg, Ky., sawmills.

Thomas Forman Company

Detroit : : : : Michigan

Von Platen Lumber Co.

Iron Mountain, Michigan

MANUFACTURERS OF

BIRCH BASSWOOD ELM MAPLE

100 M Ft. 4/4 No. 1 and 2 Common Birch.

50 M Ft. 5/4 No. 1 Common Birch.

50 M Ft. 5/4 No. 2 Common Birch.

100 M Ft. 5/4 No. 1 and 2 Common Maple.

100 M Ft. 6/4 No. 1 and 2 Common Maple.

We Solicit Your Inquiries

SHIPMENTS VIA C. & N. W.—C., M. & ST. P.—W. & M.

"Chief Brand" Maple and Beech Flooring

in 3, 4 and 13-16 and 1 1-16 inch Maple' in all standard widths and grades, will commend itself to you and your trade on its merits alone

WRITE US, WE CAN INTEREST YOU

Kerry & Hanson Flooring Co.

GRAYLING, MICHIGAN

For the Better Kind of Hardwoods

write

EAST JORDAN LUMBER CO.

East Jordan, Mich.

ALL THE MICHIGAN HARDWOODS

Makers of

LATH

SHINGLES

Imperial Brand

MAPLE FLOORING

PINE AND

HEMLOCK

S. L. EASTMAN FLOORING CO.
SAGINAW BRAND
MAPLE FLOORING
SAGINAW, MICH.

For Prompt Shipment

Basswood—100,000 ft. 5/4 No. 2 Common & Better.
Soft Maple—25,000 ft. 4/4 & 8/4 Log Run M. C. O.
White & Red Oak—12,000 ft. Log Run M. C. O.
Black Walnut—3,000 ft. Log Run M. C. O.

STRUTHERS COOPERAGE CO., Romeo, Michigan

Lumber Dried As Never Before
SEE THE DIFFERENCE

GRAND RAPIDS DRY KILN

GRAND RAPIDS VENEER WKS., SOLE MFRS., MICHIGAN

MANUFACTURERS OF

High Grade, Rotary-Cut Gum

Cut right; dried right; prices right

HUMBOLDT, - TENNESSEE

Memphis, Tenn.

1-8, 3-16 and 1-4-in. door stock.
1-20 and 1-16-in. sawed mahogany.

Quartered White Oak,
Quartered Red Oak,
Plain Red Oak,
Yellow Poplar,
White Ash and
Quartered Red Gum

Memphis, Tennessee

Sliced and Sawed, Quartered
and Plain Red and
White Oak

Walnut Cherry Ash Maple

Let us Send You Our Stock List FORT WAYNE, IND.

We can furnish anything you want in

Capacity 15 million feet per year. Ready to take care of carload orders promptly. Small orders shipped same day received, if desired.

Office, 21st and Standard.

LOUISVILLE, KY.

Mills, Magnolia, Standard and 21st Sts.



For items of Hardwood Stock or Hardwood Machinery, you will find it advantageous to write our advertisers. Get in touch!

ROTARY CUT
GUM, POPLAR, OAK

SAWED AND SLICED
QUARTERED OAK, MAHOGANY

LOUISVILLE, KENTUCKY

SOFT YELLOW POPLAR
CROSS BANDING

Huntington, West Virginia

VENEERS AND PANELS

Ahnapee Veneer & Seating Co.

HOME OFFICE, FACTORY AND VENEER MILL, ALGOMA, WIS.
VENEER AND SAWMILL, BIRCHWOOD, WIS.

We manufacture at our Birchwood plant single ply veneers of all native northern woods and deliver stock that is in shape to glue.

From our Algoma factory, where we have specialized for twenty years, we produce panels of all sizes, flat or bent to shape, in all woods, notably in Mahogany and Quarter-Sawed Oak.

We make no two-ply stock, and do not employ sliced cut quartered oak. Our quartered oak panels are all from sawed veneer.

Every pound of glue we use is guaranteed hide stock. We do not use retainers. Our gluing forms are put under powerful screws and left until the glue has thoroughly set.

If you seek a guaranteed product that is the best, based on results accomplished by most painstaking attention and study of every detail, combined with the use of the best stock and an up-to-date equipment, our product will appeal to you.

If you are a "price buyer" we probably cannot interest you.

KIEL WOODEN WARE CO.

WHEN IN THE MARKET FOR ROTARY CUT

BIRCH
BASSWOOD
OAK
ASH
ELM

VENEER

Write Us

WISCONSIN

KIEL
FACTORY AND MAIN
OFFICE

MELLEN
VENEER AND HEADING
MILL



WE manufacture all kinds of panels from the various woods usually used for that purpose.

We lock-joint all our lumber cores, and use every other means of making our product as perfectly as it can be made.

We ask only that you send your inquiries—our stock will almost sell itself after you have seen it.

AUTO DASHES, TOPS and PANELS
CHAIR BACKS and SEATS

THE WISCONSIN SEATING CO., New London, Wis.

HOWARD HANSON, President

THOMAS A. TURNER, Secy. and Treas.

THE HANSON-TURNER COMPANY

MANUFACTURERS OF

ROTARY CUT VENEER AND THIN LUMBER

ELM
BEECH
CURLY BIRCH

OAK
MAPLE

BIRCH
BASSWOOD
BIRD'S-EYE MAPLE

SPECIALTIES:

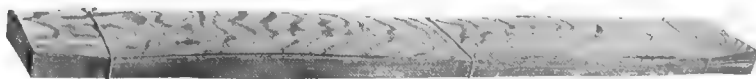
DRAWER BOTTOMS BACK PANELS CENTER STOCK
BACKING PIANO PIN BLOCKS BIRCH DOOR STOCK
CURLY BIRCH BIRD'S-EYE MAPLE

OFFICE and FACTORY at WELLS, N. Y.

VENEERS AND PANELS

OUR SPECIALTY

Highly Figured Quarter-Sawed White Oak Veneer



PUTNAM VENEER & LUMBER CO.

ROACHDALE, IND.

H. I. CUTSINGER, Gen'l Mgr.

Custom Mill Work, Storage, Inspection

ON

Foreign Fancy Woods, Mahogany, Cedar, Circassian

We receive the logs, store or warehouse them, manufacture them into lumber, cut or saw veneers, pile and store the product, and ship via any railroad. Also furnish inspection returns on logs or lumber. Can furnish accommodations and economies which it is impossible to secure elsewhere. We always have on our yards parcels of plain and figured African, Mexican and Cuban Mahogany, Circassian Walnut and Cedar logs, placed here for sale by direct foreign shippers, from which advantageous purchases can be made.

Astoria Veneer Mills & Dock Co.

Long Island City, New York

Veneers and Panels with a Reputation

WE manufacture Veneers in all the native woods and for all purposes. Also Built-up Panels in native and foreign woods—three and five-ply—and have established a reputation for furnishing high-grade material. Send us your inquiries and orders and become one of our satisfied customers.

Underwood Veneer Co.

Wausau, Wis.

CIRCIASSIAN MAHOGANY

Logs **VENEERS** Lumber

WE IMPORT WE MANUFACTURE

All Thicknesses of Mahogany
Ready for Shipment

RICE VENEER & LUMBER CO.
GRAND RAPIDS, MICH.

ESTABLISHED 1869

Adams & Raymond
Veneer Co.

INDIANAPOLIS, INDIANA
MANUFACTURERS

OF
PLAIN & FIGURED
VENEERS

CIRCIASSIAN } WALNUT
AMERICAN }

QUARTERED OAK

ANY THICKNESS

THE SOUTH

PROMINENT SOUTHERN MANUFACTURERS

ANY REASONABLE OFFER

WILL BUY THE FOLLOWING STOCK:
 DRY—IN FINE CONDITION

6000 feet 3/4" 1s-2s Qrtd. White Oak, 6" & up.
 2700 feet 5/8" No. 2 Com. Qrtd. White Oak.
 5000 feet 5/4" No. 2 Com. Qrtd. White Oak.
 5700 feet 2 1/4" Com. & Bet. Plain White Oak.
 17000 feet 4/4" 1s-2s Qrtd. Poplar.
 7500 feet 4/4" 1s-2s Yellow Poplar 7" & up wide.

3 cars 4/4", 6/4", 2", 2 1/2", 3" and 4" Poplar 1s-2s, 20" & up.
 13000 feet 5/4" Common and Better Poplar, 13" & up.
 1 car 2 1/2", 3" and 4" Common and Better Hickory.
 2 cars 4/4" No. 1 Common Walnut.

We, of course, have a complete stock of Quartered and Plain Oak, Poplar and Hickory, etc., in all grades and thicknesses; and will be glad to have your inquiries for anything you may need.

J. V. STIMSON & CO.

OWENSBORO, KY.

Carolina Spruce Co.

MANUFACTURERS

SPRUCE & HARDWOOD

Mills: Pensacola, N. C. **LUMBER** Capacity 90,000 ft. per day

4 cars 4/4 No. 1 Common Poplar	1 car 4/4 1 & 2 Poplar
3 cars 4/4 No. 2 Com. A Poplar	2 cars 5/4 No. 1 Com. & Bet. Poplar
1 car 4/4 Clear Sap Poplar	1 car 4/4 1 & 2 Basswood

Charles K. Parry & Co. Sole Selling Agts. Land Title Bldg. Philadelphia

Louisiana Long Leaf Lumber Co.

Fisher, Louisiana

Diamond



Brand

OAK FLOORING
A GUARANTEE OF PERFECTION

Boice Lumber Co., Inc.

Southern Hardwoods

MAIN OFFICE
 RICHMOND, VIRGINIA

Yards: NORFOLK, ABINGDON, GRAHAM, VA.,
 and NORTH WILKESBORO, N. C.

"WE ARE GETTING RESULTS"

WRITES ONE ADVERTISER

This Means That He Is Getting

NEW BUSINESS

Through His Ad

If we can do it for him is there any logical reason why we can't for you?

MAKE US PROVE IT

HARDWOOD RECORD, CHICAGO

For Veneer and Panel Manufacturers

Your Consumers' Lists Cost You BIG MONEY

We can save it all and relieve you of all the detail and effort necessary to tabulate consumers' wants. **Our Card Index System of those wants,** just out, is the result of systematic effort. It is endorsed by your competitor.

Can You Afford to Give Him that Advantage?

HARDWOOD RECORD

CHICAGO

THE SOUTH

PROMINENT SOUTHERN MANUFACTURERS

William S. Whiting

MANUFACTURER AND WHOLESALE

WHITE PINE

BASSWOOD

BIRCH

BUCKEYE

CHESTNUT

MAPLE

POPLAR

ASHEVILLE, N. C.

OAK

CHERRY
1 Car 4/4
Log Run
Mill Cull
Out,

OAK
84,000 ft. 4/4
Log Run
Quartered.

WE HAVE IT

W. W. DEMPSEY

Manufacturer and
Wholesaler of

HARDWOODS

CYPRESS
250,000 feet
of 4/4 No. 1
Common &
Better, Old
grading.

SPRUCE
4/4 and 8/4
Clear and
Select, 8/4
Box.

BAND SAWED STOCK

A LINE BRINGS PRICE BY RETURN MAIL

General Offices
Johnstown, Pa.

New York Office
No. 18 Broadway

WE MANUFACTURE AND
DEAL IN

**TIES, HARDWOOD LUMBER
AND TIMBER**

We want to buy a large
amount of 4/4, 8'—8'6"

Oak from Tie Sides

Hill Bros. Tie & Lumber Company

Charleston, W. Va.

Baker-Matthews Manufacturing Co.

Sikeston, Mo.

**Band Sawn
Southern Hardwoods**

SPECIALTIES

RED GUM, PLAIN OAK

SEND US YOUR INQUIRIES

GARETSON-GREASON LUMBER CO.

1002-1005 Times Bldg.

ST. LOUIS

MANUFACTURERS

Three Mills

Frank Purcell Kansas City
U. S. A.

Exporter of Black Walnut Logs



FIGURED WALNUT IN LONG WOOD
AND STUMPS

Our Corps of Inspectors

Intelligent!

Highly Trained!

Conscientious!

Is assurance that you will get what your order
calls for when you buy Gum from us.

**Himmelberger-Harrison
Lumber Company**

Cape Girardeau,

Missouri

Salt Lick Lumber Co.

SALT LICK

KENTUCKY

MANUFACTURERS OF



Oak Flooring

Complete stock of 3/8" and 13/16" in all
standard widths

BUFFALO

The Foremost Hardwood Market of the East

T. SULLIVAN & CO.

SPECIALTIES:

Gray Elm, Brown Ash

Pacific Coast Fir and Spruce

2 ARTHUR STREET

ORSON E. YEAGER

SPECIALTIES:

Oak, Ash and Poplar

932 ELK STREET

ANTHONY MILLER

**HARDWOODS
OF ALL KINDS**

893 EAGLE STREET

G. ELIAS & BRO.

HARDWOODS

White Pine, Yellow Pine, Spruce,
Hemlock, Fir, Lumber, Timber, Mill-
work, Boxes, Maple and Oak Flooring

955-1015 ELK STREET

I. N. Stewart & Bro.

Specialties

Cherry and Oak

892 Elk Street

Standard Hardwood Lumber Co.

**OAK, ASH and
CHESTNUT**

1075 Clinton Street

BUFFALO HARDWOOD LUMBER CO.

We want to buy for cash

OAK, ASH AND OTHER HARDWOODS

All grades and thicknesses.

Will receive and inspect stock at shipping point.

Branch yard, Memphis, Tenn.

940 Seneca Street,

BUFFALO

Hugh McLean Lumber Co.

OUR SPECIALTY:

**QUARTERED
WHITE OAK**

940 ELK STREET

The above firms carry large and well assorted stocks of all kinds and grades of Hardwoods, and have every facility for filling and shipping orders promptly. They will be pleased to have your inquiries.



Dependable Joints At a Great Saving

WITH dry lumber, good glue, the very finest quartered oak, mahogany, or any other kind of tops can be made automatically at one operation with a tapered wedge dovetail glue joint without any doubt as to its holding up with any kind of stain or finish. The Tapered Wedge Joint has proven to be as perfect a joint as can be made by any method; it is stronger than other joints because it has 20% more wood surface and the clamping pressure is evenly distributed along the entire length of the jointed edge.

These facts, based on the results of jointing lumber automatically at one operation on the

Does Not See How Any Furniture Factory Can Get Along Without It

STANDARD RED CEDAR CHEST CO. INC.
Altavista, Va., Oct. 28, 1912.

Linderman Machine Co.,
Muskegon, Mich.

Gentlemen:—We are in receipt of your inquiry of the 26th instant and beg to note what you say concerning the "Linderman" machine we bought of you, and in reply would state that since we started this machine up over two months ago, it has been giving us excellent service and we would not be without it for any amount of money, as in the first place, we could not get out the grade of chests that we are getting out, and we do not see how any furniture concern can get along without one of these machines. It is undoubtedly one of the simplest machines to do the work that it does that we have ever seen and we think that it is one of the best built machines manufactured in this country today, and from the looks and action of this machine we do not contemplate any trouble whatsoever with it and have decided to install another in the very near future. We beg to remain,

Yours very truly,

STANDARD RED CEDAR CHEST CO.,
By E. H. Lane, V-Pres. and Gen. Mgr.

Linderman Automatic Dovetail Glue Jointer

which means a reduction in cost of as much as 50 to 70% of the labor bills, 40 to 70% saving in glue bills, the saving of considerable ripping by jointing rough edge lumber without saw kerf and edge waste and then sizing the panel to width without the waste in sizing, are a saving that is patent to every furniture manufacturer.

The jointing of lumber automatically at one operation instead of several operations marks a new achievement in the jointing of lumber and is proving of great value in the building of furniture.

LINDERMAN MACHINE CO.
Muskegon, Mich.

New York City.
Knoxville, Tenn.

Woodstock, Ont.
St. Louis, Mo.

Vansant,

Manufacturers Old-Fashioned

5-8 and 4-4
in Wide Stock,
Specialty

Kitchen &

Soft
Yellow
Poplar

Company

Ashland, Kentucky

EASTERN REPRESENTATIVE, John L. Cochran
601 W. 115th Street, New York City

YOU pay a *little* more for our hardwood lumber than you do for many others', but it's worth *much* more.

With our modern and first-class equipment and expert operatives, we couldn't make bad lumber if we tried to, because the *quality* and *size* of our virgin tough mountain white ash, red birch, yellow poplar, buckeye, maple, red oak, cherry and basswood, averaging less than three logs to the thousand, and 95 per cent sixteen feet, is the best type of hardwood timber growth in the United States, and shows a larger percentage of *firsts*.

If you are a discriminating buyer, let's get acquainted.

LITTLE RIVER LUMBER COMPANY

Townsend, Tenn.

W. H. White Company Boyne City Lumber Company

Mills and General Office: BOYNE CITY, MICH.

Sales Office: BUFFALO, N. Y.

STOCK DRY—STANDARD GRADES—BEST
MANUFACTURE—CAR OR CARGO SHIPMENTS

WE OFFER

All Kinds

OF

Hardwood and Hemlock
Lumber

Hardwood

Flooring, Lath

AND

Dimension Stock

YELLOW POPLAR

MANUFACTURERS OF HAND SAWED

POPLAR
QUARTERED OAK
PLAIN OAK
CHESTNUT
BASSWOOD



SPECIALTY
QUARTER SAWED
WHITE OAK

Coal Grove, Ohio, U. S. A.

LUMBER CO.

New York Botanical Garden Library



3 5185 00256 2948

